

CORRECTIONS MADE :
STATION POSITIONS #5

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5403
(MLR 58)
3 March - 5 April 1954

and

CCOFI CRUISE 5404
(MLR 59)
7 April - 13 May 1954

SIO Reference 58-65
15 September 1958

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5403
(MLR 58)
3 March - 5 April 1954

and

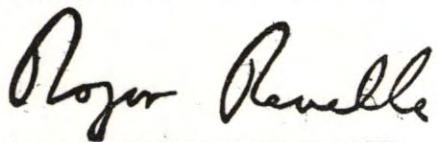
CCOFI CRUISE 5404
(MLR 59)
7 April - 13 May 1954

Sponsored by

Marine Research Committee

SIO Reference 58-65
15 September 1958

Approved for distribution:



Roger Revelle, Director

CONTENTS

INTRODUCTION	iii
CRUISE 5403	
List of Figures	v
Personnel	vi
Tabulated Data	58
CRUISE 5404	
List of Figures	viii
Personnel	xi
Tabulated Data	90
DISTRIBUTION LIST	128

INTRODUCTION

The data in this report were collected on the fifty-eighth and the fifty-ninth consecutive cruises of the California Cooperative Oceanic Fisheries Investigations program. The R/V N. B. Scofield of the California Department of Fish and Game and the R/V Crest and R/V Horizon of the Scripps Institution of Oceanography participated in the fifty-eighth cruise while the R/V Crest, the R/V E. W. Scripps, the R/V Horizon and the R/V Spencer F. Baird of the Scripps Institution participated in the fifty-ninth cruise.

The data are tabulated at observed depths; the interpolated and computed values are tabulated at standard depths accompanied by charts of horizontal distribution. The presentation of data in this report does not constitute publication, and the interpretations herein may be subject to modification as the program continues.

STANDARD PROCEDURES

To indicate degree of accuracy, temperatures are recorded in tenths of a degree when obtained by bucket thermometer, thermograph, or bathythermograph, while temperatures from reversing thermometers are recorded in hundredths of a degree. Extrapolated values and values interpolated between remote observations are entered within parentheses. A hyphen is used to indicate a missing observed value. The time is the time of messenger release. When more than one cast was made on a station, each messenger time and wire angle is given in the order of increasing depth of casts. A line is left blank between the observed data of each cast.

FOOTNOTES

In addition to standard footnotes, three special notations are used without footnotes because their meaning is always the same.

To indicate a premature or a delayed reversal of the water-sampling device which results in certain depth and property errors, the following notation is used.

p: pretrip or posttrip.

Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

r: rejected value (value seems to be definitely wrong),

u: uncertain value (value may be correct; occasionally it can influence the drawing of the property curve).

FORMAT

These data are typed in the format of the University of California Press publication, "Oceanic Observations of the Pacific."¹¹ So that these pages can be used as copy for the 1954 volume, the first page of the Cruise 5403 data is numbered 58 and the first page of 5404 is numbered 90.

"BASIC" DATA STATEMENT

The following statement is given in each data section to give a summary of the data contained on the pages that follow. It includes the name of the ship, date of departure, date of arrival, location of the observations, and the type of observations made. The following statement is given in each data section to give a summary of the data contained on the pages that follow. It includes the name of the ship, date of departure, date of arrival, location of the observations, and the type of observations made.

NOTATIONS

Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

11. The author would like to thank the University of California Press for permission to use their notation.

FIGURES

1. CCOFI Cruise 5404 (MLR 59), station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Surface currents measured by geomagnetic electrokinetograph (GEK)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of temperature at 200 meters
7. Horizontal distribution of salinity at 200 meters

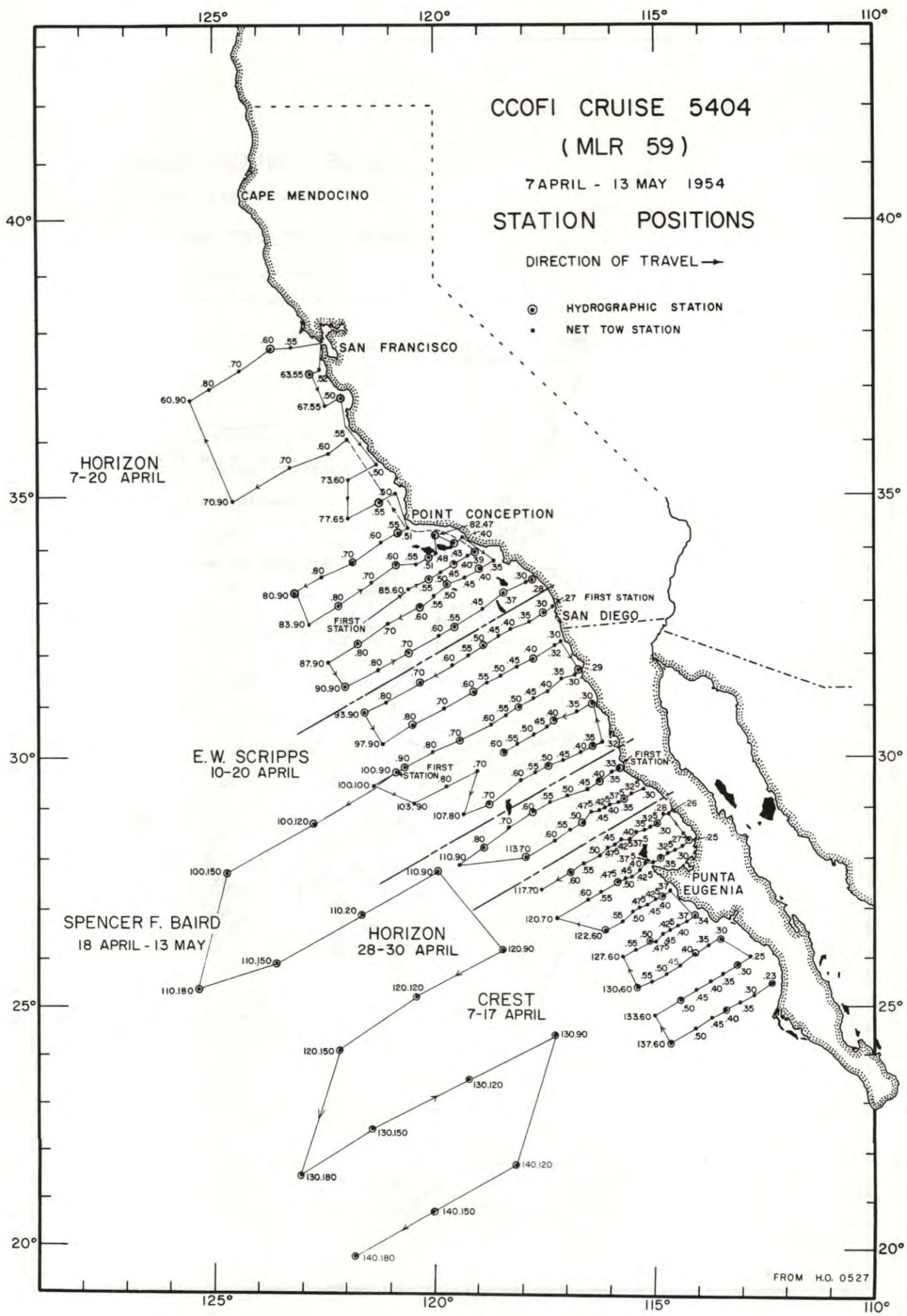


FIGURE 1

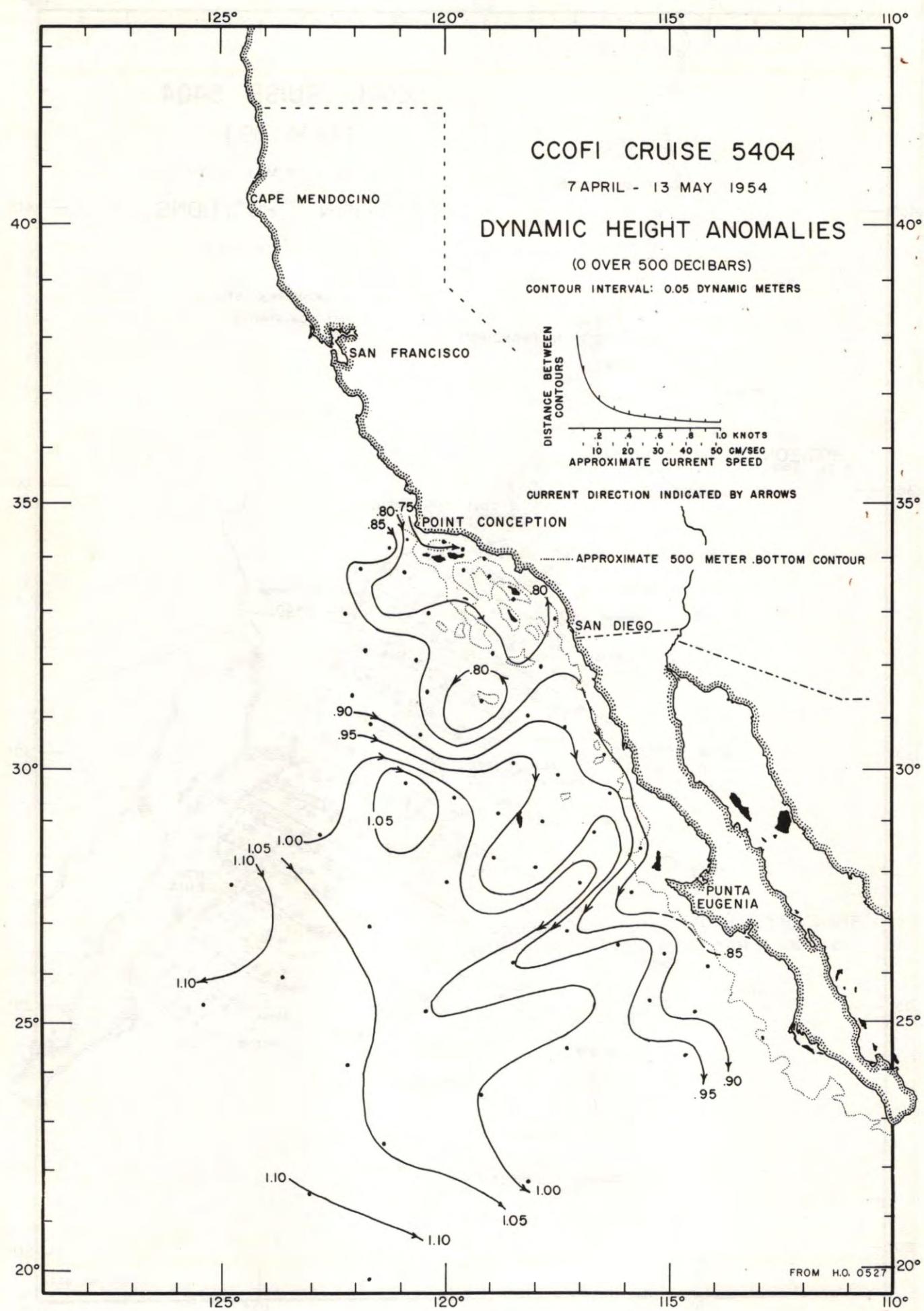


FIGURE 2

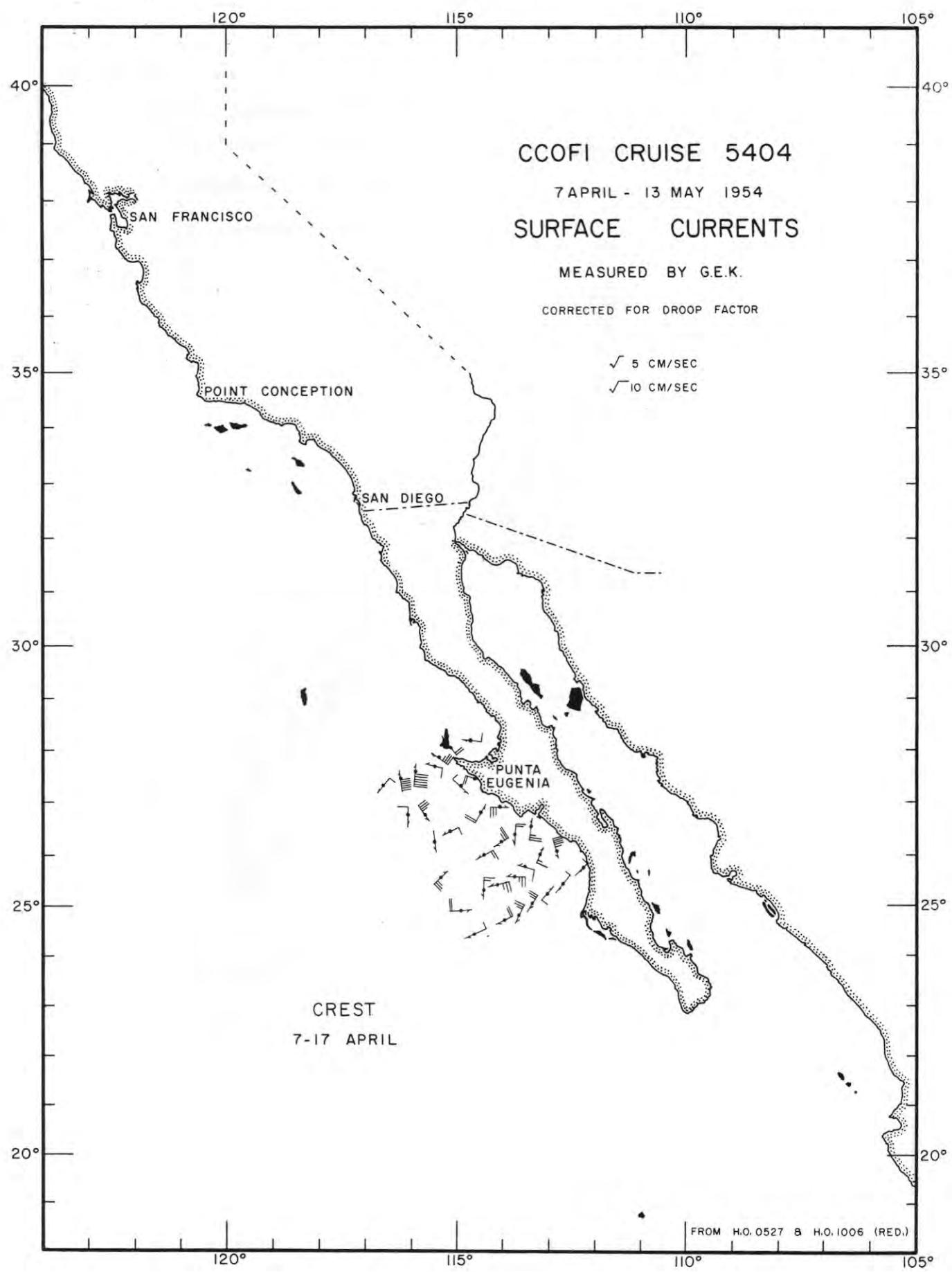


FIGURE 3

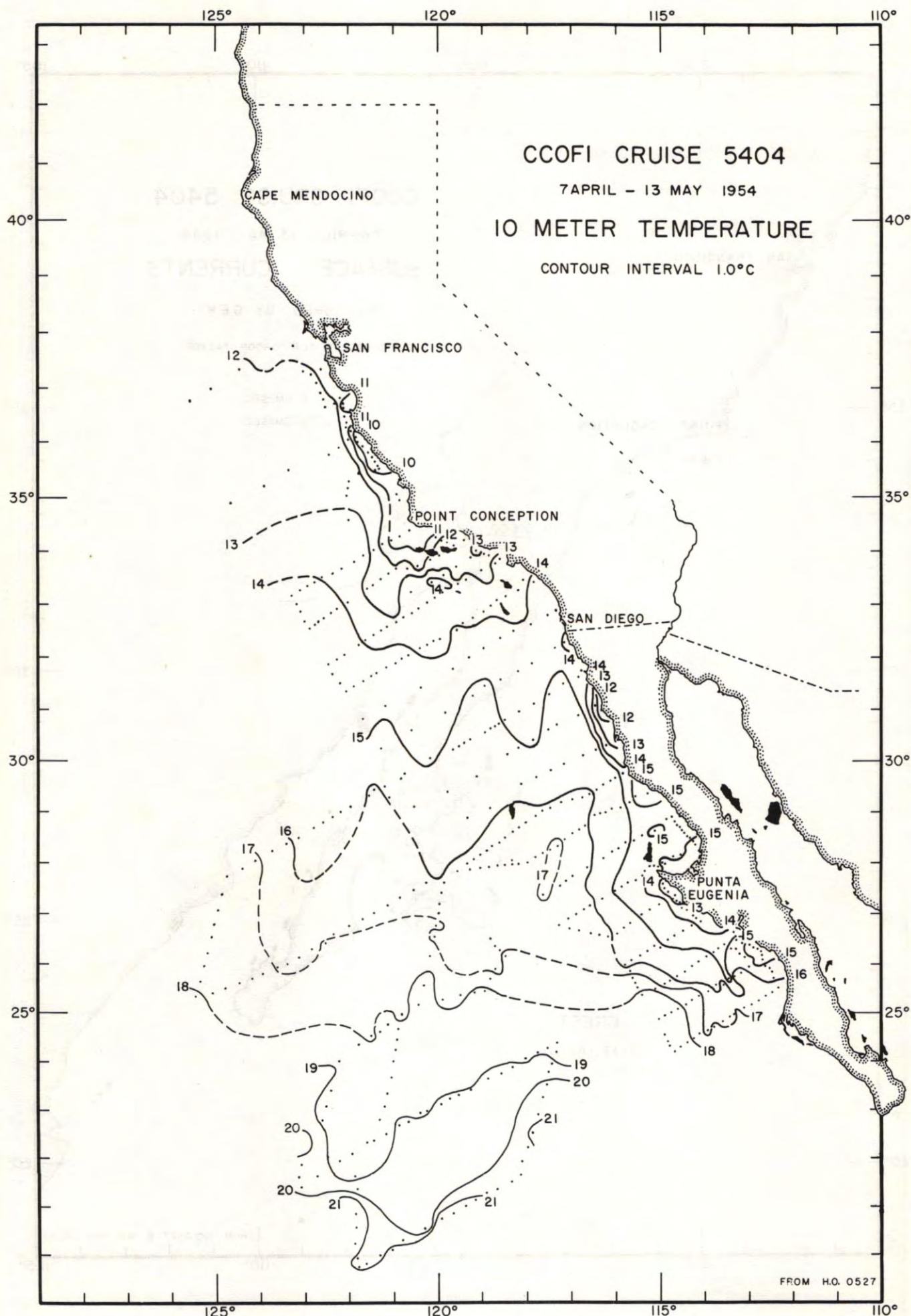


FIGURE 4

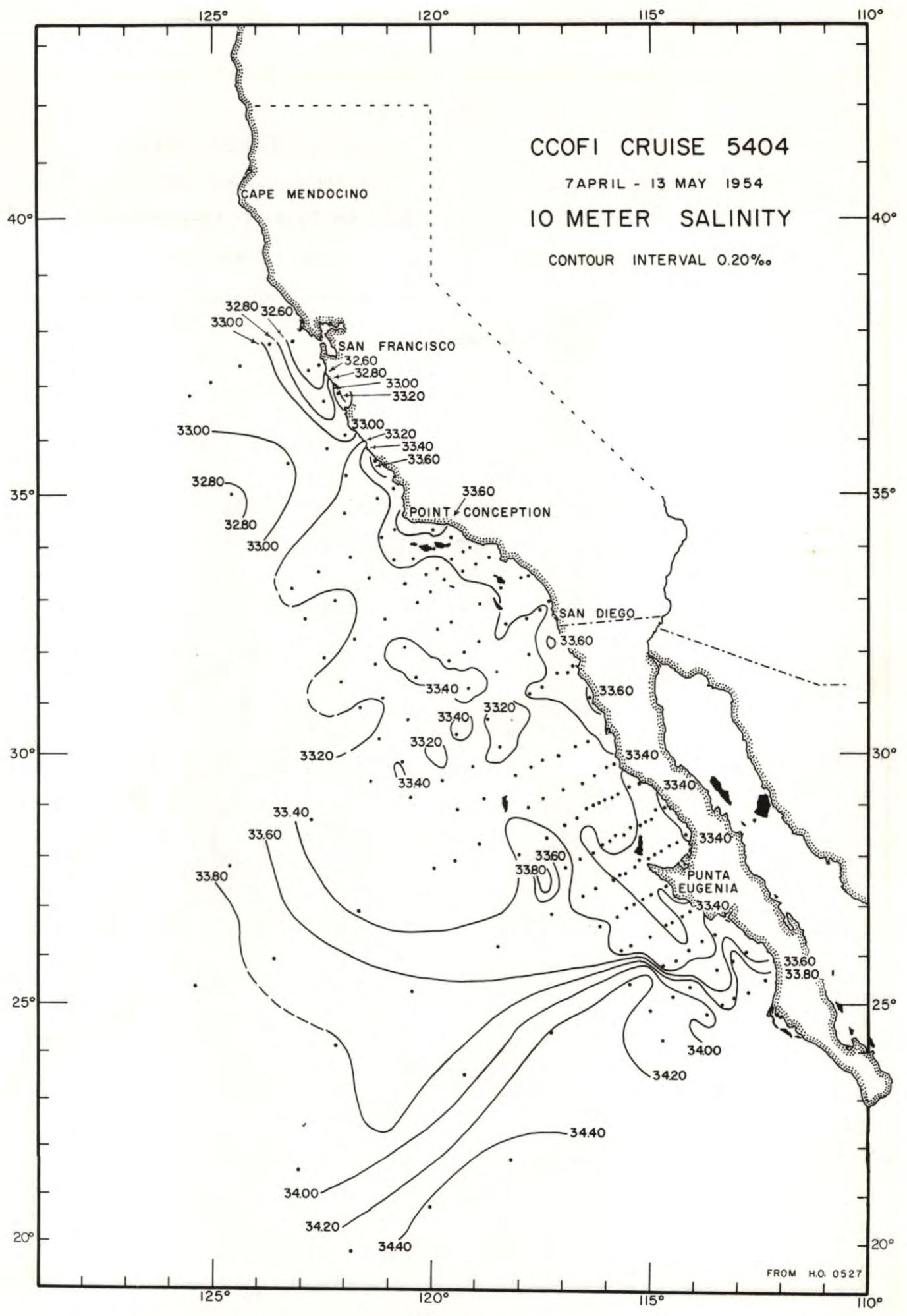


FIGURE 5

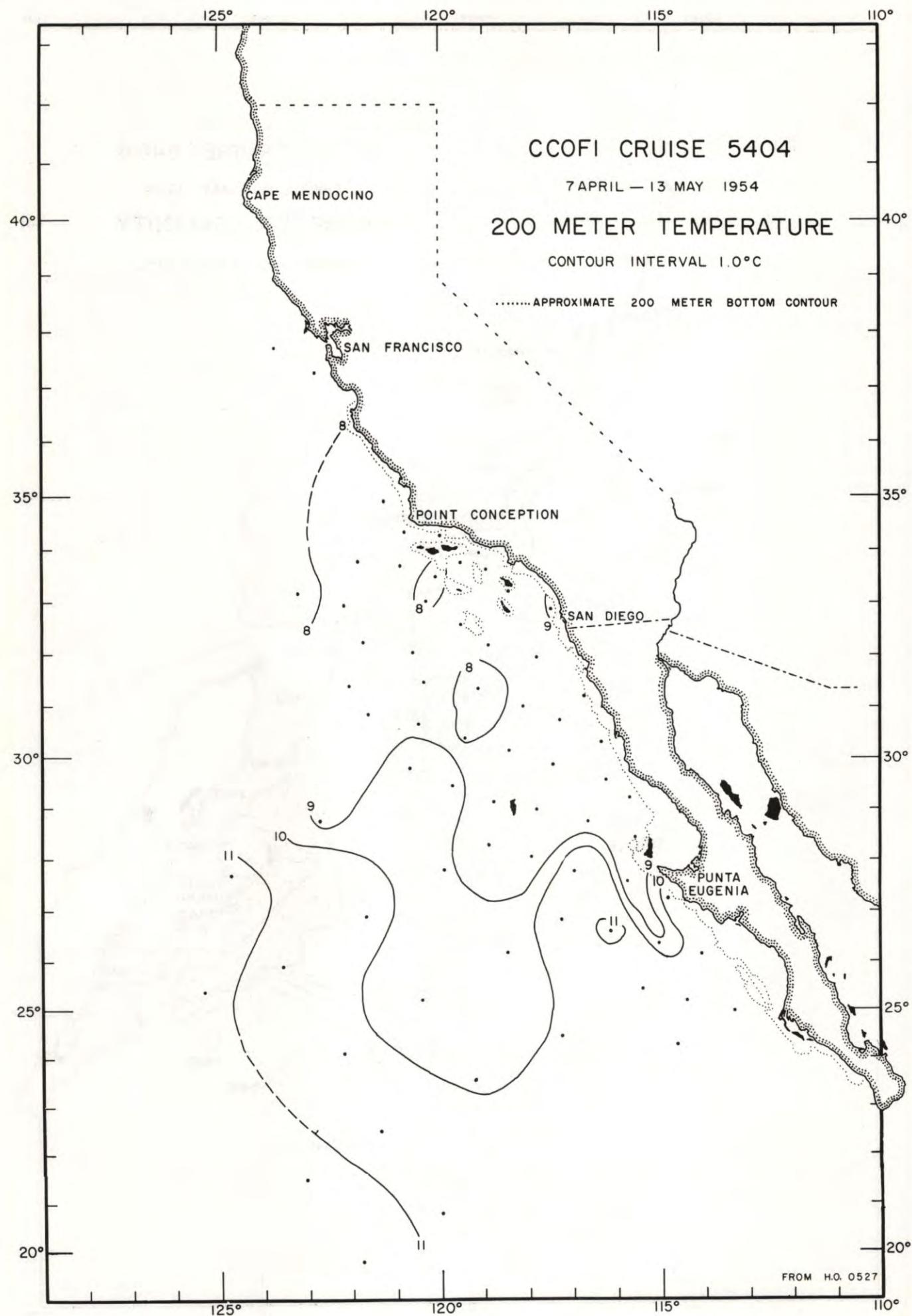


FIGURE 6

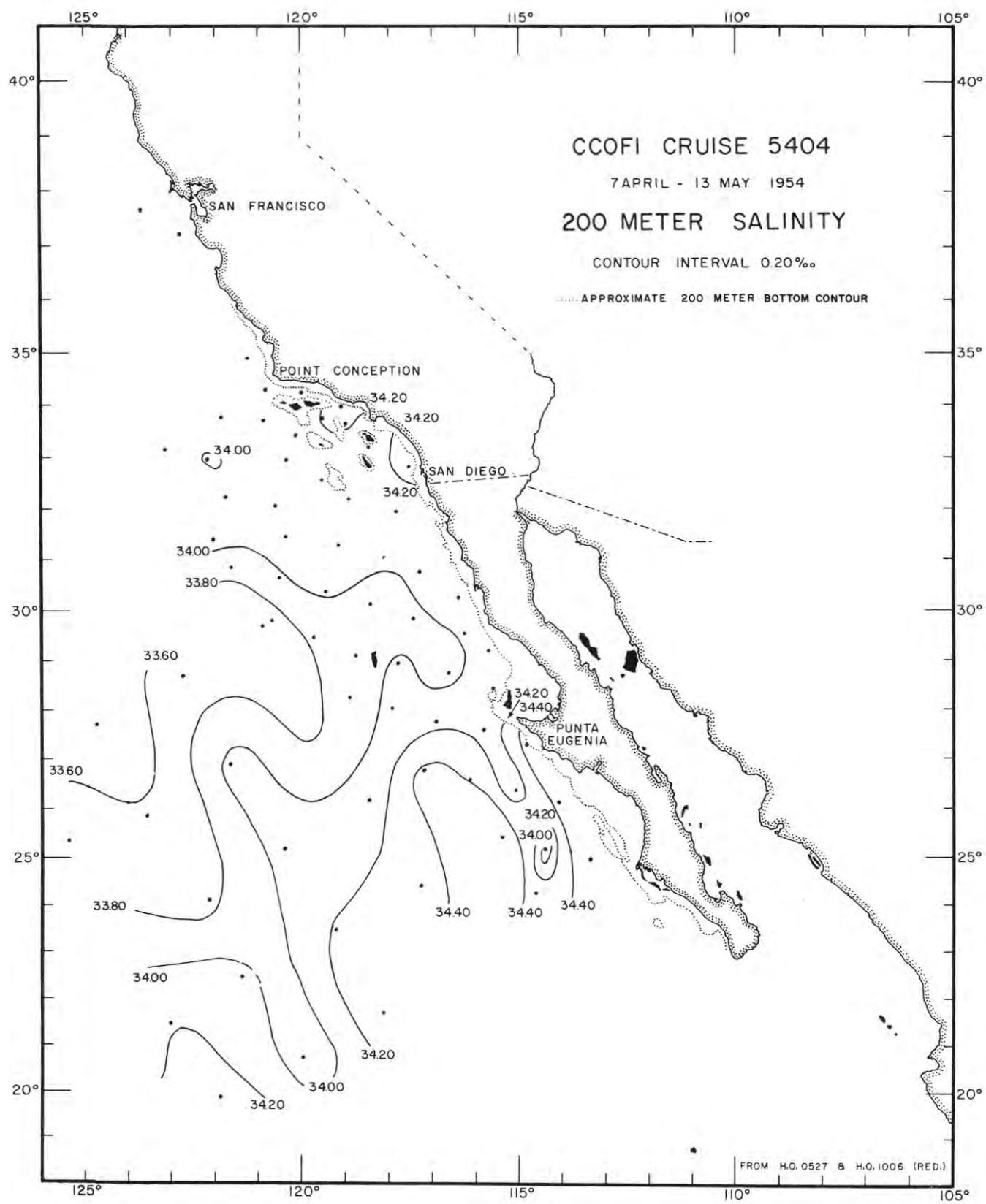


FIGURE 7

FROM H.O. 0527 & H.O. 1006 (RED.)

CRUISE 5404
PERSONNEL

SHIPS' CAPTAINS

Davis, Laurence E., R/V Crest
Ferris, Noel, R/V Horizon
Newbegin, Robert C., R/V E. W. Scripps
Wyatt, Vernon H., R/V Spencer F. Baird

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Crest

Payne, Miles M., Jr., Senior Marine Technician
Brennan, Robert E., Marine Technician
Grom, Robert A., Fishery Aid, U. S. Fish and Wildlife Service
Lance, James R., Marine Technician
O'Connell, Charles P., Fishery Research Biologist, U. S. Fish and Wildlife Service

R/V E. W. Scripps

Worrall, Charles G., Senior Marine Technician
Hoffman, Raymond L., Jr., Marine Technician
Nair, R. V., visiting biologist, Assistant Research Office, Ministry of Agriculture, India
Taft, Bruce A., Fishery Aid, U. S. Fish and Wildlife Service
Uren, Leon W., Laboratory Technician

R/V Horizon (First Part)

Gilkey, Robert W., Senior Marine Technician
Linn, Robert J., Marine Technician
Willis, Robert S., Marine Technician
Casey, Harold D., Fishery Aid, U. S. Fish and Wildlife Service
Squier, Earl D., Laboratory Technician (San Diego to Port Hueneme)

R/V Horizon (Second Part)

Payne, Miles M., Jr., Senior Marine Technician
Grom, Robert A., Fishery Aid, U. S. Fish and Wildlife Service
Lance, James R., Marine Technician

R/V Spencer F. Baird

Horrer, Paul L., Assistant Research Oceanographer
Cochrane, John D., Junior Research Oceanographer
Kivlen, John C., Marine Technician
Smith, Alan C., Senior Marine Technician

CCOFI Cruise 5404

Tabulated Data

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δT $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

E. W. SCRIPPS; April 11, 1954; 2234 GCT; 30° 47'N, 121° 35'W; sounding, 2250 fm;
wind, 270°, force 5; weather, overcast; sea, very rough; wire angle, 10°.

0	14.2	33.14	0	14.2	33.14	24.73	322	0.00
10	14.77	33.14	10	14.77	33.14	24.61	334	0.03
30	14.70	33.15	20	14.76	33.15	24.62	333	0.07
40	14.54	33.12	30	14.70	33.15	24.63	332	0.10
50	13.40	33.02	50	13.40	33.02	24.80	316	0.16
60	12.80	32.93	75	12.50	33.04	24.99	298	0.24
70	12.70	33.04	100	10.29	33.27	25.57	242	0.31
80	12.08	33.04	150	9.00	33.66	26.09	193	0.42
89	11.77	33.26	200	8.19	33.89	26.40	164	0.51
99	10.35	33.27	250	7.50	34.00	26.58	146	0.59
123	9.65	33.43	300	6.94	34.08	26.72	133	0.66
151	8.98	33.67	400	6.02	34.17	26.92	114	0.79
199	8.20	33.89	500	5.39	34.24	27.05	102	0.90
258	7.40	34.02	600	(5.03)	(34.33)	(27.16)	(92)	(1.01)
359	6.40	34.14						
475	5.52	34.22						
598	5.04	34.33						

E. W. SCRIPPS; April 13, 1954; 1040 GCT; 31° 55'N, 117° 49'W; sounding, 450 fm;
wind, calm; weather, fog; sea, moderate; wire angle, 00°.

0	14.8	33.39	0	14.8	33.39	24.80	316	0.00
12	14.84	33.37	10	14.85	33.37	24.77	319	0.03
32	14.40	33.37	20	14.69	33.37	24.80	316	0.06
42	12.21	33.29	30	14.45	33.37	24.85	311	0.10
51	11.23	33.25	50	11.29	33.25	25.38	260	0.15
61	10.94	33.57	75	10.61	33.54	25.73	227	0.21
70	10.72	33.53	100	9.99	33.62	25.90	211	0.27
80	10.50	33.55	150	9.15	33.92	26.27	176	0.37
90	10.25	33.59	200	8.72	34.11	26.49	155	0.45
100	9.99	33.62	250	8.53	34.22	26.60	145	0.53
124	9.53	33.78	300	7.98	34.25	26.71	134	0.60
153	9.11	33.93	400	6.93	34.32	26.91	115	0.73
202	8.70	34.12	500	6.20	34.38	27.06	101	0.84
261	8.48	34.23	600	5.56	34.39	27.15	92	0.95
364	7.23	34.29						
483	6.31	34.38						
608	5.51	34.39						

E. W. SCRIPPS; April 12, 1954; 2208 GCT; 31° 16'N, 119° 07.5'W; sounding, 1700 fm;
wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 10°.

0	15.1	33.50	0	15.1	33.50	24.81	315	0.00
10	15.08	33.49	10	15.08	33.49	24.81	315	0.03
30	15.07	33.48	20	15.08	33.48	24.80	316	0.06
40	14.38	33.53	30	15.07	33.48	24.81	315	0.10
50	12.22	33.58	50	12.22	33.58	25.47	252	0.15
60	11.00	33.65	75	10.69	33.78	25.90	211	0.21
70	10.20	33.73	100	8.72	33.87	26.30	173	0.26
79	9.37	33.79	150	8.29	34.00	26.47	157	0.34
89	8.94	33.78	200	7.82	34.07	26.59	146	0.42
98	8.76	33.86	250	7.37	34.13	26.70	135	0.49
122	8.43	33.96	300	6.95	34.19	26.81	125	0.56
151	8.28	34.00	400	6.22	34.28	26.98	109	0.68
198	7.82	34.31	500	5.69	34.34	27.09	98	0.79
255	7.31	34.14	600	(5.28)	(34.37)	(27.17)	(91)	(0.89)
355	6.54	34.24						
471	5.83	34.33						
596	5.29	34.37						

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OBSERVED			INTERPOLATED			COMPUTED		
Z	T	S	Z	T	S	σ_t	$\delta T \cdot 10^{-5} \text{ cm/g}$	ΔD
m	°C	%	m	°C	%	g/L		dyn. m

97.80

E. W. SCRIPPS; April 12, 1954; 0951 GCT; 30° 35.5'N, 120° 30'W; sounding, 2000 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 18°.

0	14.6	33.37	0	14.6	33.37	24.82	314	0.00
10	14.74	33.37	10	14.74	33.37	24.79	317	0.03
28	14.73	33.37	20	14.73	33.37	24.79	317	0.06
37	14.73	33.32	30	14.73	33.36	24.79	317	0.10
46	14.61	33.30	50	14.22	33.25	24.81	315	0.16
54	13.38	33.10	75	11.82	33.12	25.18	280	0.23
63	12.66	33.03	100	9.90	33.22	25.60	240	0.30
72	12.09	33.08	150	9.06	33.84	26.22	181	0.40
80	11.29	33.15	200	8.37	33.99	26.45	159	0.49
89	10.48	33.12	250	7.84	34.07	26.59	146	0.57
111	9.61	33.46	300	7.29	34.15	26.73	132	0.64
136	9.35	33.75	400	6.70	34.25	26.89	117	0.77
179	8.56	33.95	500	5.96	34.30	27.03	104	0.89
231	8.08	34.04						
323	7.10	34.18						
429	6.52	34.27						
546	5.56	34.31						

100.29

E. W. SCRIPPS; April 15, 1954; 0220 GCT; 31° 42.5'N, 116° 43.5'W; sounding, 50 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 02°.

0	14.30	33.40	0	14.30	33.40	24.91	305	0.00
10	13.22	33.50	10	13.22	33.50	25.21	277	0.03
15	12.60	33.52	20	11.74	33.57	25.55	244	0.06
20	11.74	33.57	30	10.93	33.60	25.72	228	0.08
25	11.42	33.58	50	10.11	33.66	25.91	210	0.12
30	10.93	33.60						
35	10.49	33.66						
40	10.29	33.62						
50	10.11	33.66						

100.50

E. W. SCRIPPS; April 15, 1954; 1550 GCT; 30° 58.5'N, 118° 04'W; sounding, 904 fm; wind, 200°, force 1; weather, overcast; sea, rough; wire angle, 07°.

0	15.1	33.17	0	15.1	33.17	24.56	339	0.00
12	14.90	33.19	10	14.91	33.19	24.62	333	0.03
27	14.89	33.17	20	14.89	33.18	24.61	334	0.07
52	13.71	33.10	30	14.89	33.16	24.60	335	0.10
61	12.77	33.12	50	13.94	33.10	24.75	320	0.17
70	11.90	33.10	75	11.57	33.11	25.22	276	0.24
80	11.25	33.12	100	10.31	33.19	25.51	248	0.31
99	10.36	33.18	150	8.79	33.84	26.26	177	0.41
123	9.29	33.48	200	8.13	34.01	26.50	154	0.50
151	8.76	33.85	250	7.95	34.09	26.59	146	0.58
199	8.14	34.01	300	7.49	34.13	26.69	136	0.65
265	7.90	34.11	400	6.10	34.22	26.95	111	0.78
367	6.32	34.18	500	5.62	34.31	27.08	99	0.89
493	5.67	34.31	600	5.21	34.37	27.17	91	0.99
673	4.96	34.41	700	4.85	34.42	27.25	83	1.08
894	4.25	34.49	800	4.53	34.46	27.32	76	1.17
1195	3.45	34.54	1000	3.95	34.51	27.42	67	1.33

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δT^3 $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

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E. W. SCRIPPS; April 16, 1954; 0451 GCT; 30°20.5'N, 119°26.5'W; sounding, 2000 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 06°.

0	15.5	33.48	0	15.5	33.48	24.71	324	0.00
15	15.00	33.48	10	15.08	33.48	24.80	316	0.03
30	14.98	33.40	20	15.00	33.46	24.81	315	0.06
55	13.80	33.24	30	14.98	33.40	24.76	320	0.10
64	13.44	33.25	50	14.02	33.26	24.86	310	0.16
74	11.42	33.18	75	11.28	33.18	25.33	265	0.23
83	10.43	33.20	100	9.69	33.41	25.78	222	0.29
102	9.64	33.42	150	8.52	33.76	26.24	179	0.39
126	9.02	33.64	200	7.97	34.03	26.54	150	0.48
153	8.48	33.78	250	7.54	34.09	26.65	140	0.55
200	7.97	34.03	300	7.32	34.08	26.67	138	0.62
240	7.58	34.09	400	6.37	34.14	26.85	121	0.76
365	6.96	34.08	500	5.44	34.26	27.06	101	0.88
490	5.44	34.26	600	5.41	34.31	27.10	97	0.98
577	5.47	34.29	700	4.98	34.43	27.25	83	1.08
760	4.70	34.45	800	4.53	34.46	27.32	76	1.17
1029	3.70	34.47	1000	3.80	34.47	27.41	68	1.33

100.70

E. W. SCRIPPS; April 16, 1954; 1630, 1707 GCT; 29°47'N, 120°40'W; sounding, 2000 fm; wind, 300°, force 1; weather, overcast; sea, rough; wire angle, 03°, 02°.

0	16.2	33.33	0	16.2	33.33	24.44	350	0.00
14	16.10	33.40	10	16.11	33.38	24.50	344	0.04
29	16.10	33.44	20	16.10	33.42	24.53	341	0.07
54	16.10	33.35	30	16.10	33.44	24.55	340	0.10
64	16.09	33.45	50	16.10	33.35	24.48	346	0.17
74	16.08	33.41	75	16.08	33.41	24.53	341	0.26
83	16.06	33.45	100	15.26	33.42	24.72	323	0.34
102	15.10	33.41	150	11.67	33.24	25.31	267	0.49
127	13.36	33.31	200	9.72	33.61	25.93	208	0.61
156	11.33	33.24	250	8.88	33.72	26.16	186	0.71
205	9.61	33.64	300	8.02	33.86	26.40	164	0.80
273	8.51	33.76	400	6.43	34.08	26.79	127	0.95
			500	5.79	34.15	26.93	113	1.08
377	6.66	34.05	600	5.44	34.22	27.03	104	1.20
503	5.78	34.15	700	5.06	34.29	27.13	94	1.30
693	5.07	34.29	800	4.61	34.42	27.28	80	1.40
905	4.24	34.50	1000	3.98	34.50	27.41	68	1.56
1228	3.45	34.47						

100.90

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Z m	OBSERVED		INTERPOLATED			COMPUTED		
	T °C	S %	Z m	T °C	S %	σ_t g/L	δT $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

100.90

SPENCER F. BAIRD; April 18, 1954; 0917, 0938, 1045, 1115, 1309 GCT; 29° 42'N,
120° 49'W; sounding, 2120 fm; wind, 330°, force 3; weather, overcast; sea,
moderate; wire angle, 22°, 30°, 36°, 36°, 20°.

0	16.1	33.40	0	16.1	33.40	24.52	342	0.00
10	16.16	33.40	10	16.16	33.40	24.50	344	0.04
			20	16.17	33.40	24.50	344	0.08
26	16.16	33.41	30	16.14	33.42	24.52	342	0.11
39	16.07	33.44	50	16.07	33.42	24.54	340	0.18
47	16.06	33.42	75	16.32	33.45	24.50	344	0.27
55	16.08	33.42	100	15.79	33.37	24.56	339	0.35
64	16.08	33.46	150	11.80	33.42	25.42	257	0.50
72	16.34	33.45	200	9.25	33.63	26.03	199	0.62
84	16.08	33.47	250	8.17	33.85	26.37	166	0.71
91	16.06	33.43	300	7.61	33.95	26.53	151	0.80
110	15.04	33.33	400	6.60	34.10	26.79	127	0.94
132	13.14	33.37	500	5.72	34.21	26.99	108	1.06
175	10.26	33.49	600	5.30	34.34	27.14	93	1.17
			700	5.02	34.34	27.17	91	1.27
222	8.68	33.78	800	4.57	34.45	27.31	77	1.36
			1000	3.99	34.46	27.38	71	1.53
340	7.24	34.02						
458	5.97	34.17						
585	5.38	34.32						
526	5.60	34.23						
631	5.12	34.35						
732	4.94	34.34						
785	4.66	34.43						
848	4.33	34.47						
896	4.20	34.47						
945	4.11	34.51						
994	3.99	34.46						
1043	3.86	34.47						
1093	3.73	34.50						
1152	3.57	34.51						
1252	3.38	34.52						

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ_t g/L	$\delta_T \cdot 10^{-5}$ cm ³ /g	ΔD

SPENCER F. BAIRD; April 19, 1954; 0313, 0937 GCT; 28°41.5'N, 122°43'W; sounding, 2310 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 25°, 15°.

0	15.8	33.22	0	15.8	33.22	24.45	349	0.00
9	15.96	33.21	10	15.95	33.21	24.40	354	0.04
28	15.46	33.21	20	15.55	33.21	24.49	345	0.07
37	15.45	33.19	30	15.45	33.21	24.52	342	0.10
46	15.47	33.19	50	15.44	33.18	24.49	345	0.17
55	15.36	33.17	75	13.85	33.05	24.73	322	0.26
64	14.90	33.13	100	12.55	33.08	25.02	295	0.33
73	14.00	33.06	150	10.11	33.27	25.60	240	0.47
82	13.48	33.02	200	8.70	33.72	26.19	184	0.58
91	13.16	33.06	250	8.06	33.99	26.49	155	0.66
112	11.78	33.10	300	7.50	34.05	26.62	143	0.74
138	10.57	33.17	400	6.48	34.13	26.83	123	0.88
181	9.06	33.56	500	5.89	34.26	27.01	106	1.00
235	8.25	33.96	600	5.38	34.35	27.14	93	1.11
324	7.24	34.07	700	4.79	34.40	27.25	83	1.20
433	6.21	34.16	800	4.37	34.42	27.31	77	1.29
552	5.54	34.29	1000	3.81	34.54	27.46	63	1.45
486	5.94	34.25						
595	5.42	34.34						
681	4.84	34.40						
733	4.70	34.40						
781	4.43	34.42						
828	4.27	34.43						
876	4.15	34.49						
923	4.00	34.50						
953	3.86	34.51						
972	3.88	34.52						
1020	3.78	34.54						
1073	3.63	34.54						

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δT $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

100.150

SPENCER F. BAIRD; April 20, 1954; 0305, 0445 GCT; $27^{\circ}40.5'N$, $124^{\circ}45.5'W$; sounding, 2350 fm; wind, 350° , force 2; weather, overcast; sea, moderate; wire angle, 10° .

0	17.5	33.80	0	17.5	33.80	24.50	344	0.00
10	17.48	33.78	10	17.48	33.78	24.48	346	0.03
29	17.35	33.84	20	17.40	33.83	24.54	340	0.07
39	17.32	33.84	30	17.35	33.84	24.56	339	0.10
49	17.27	33.84	50	17.26	33.84	24.58	337	0.17
59	17.23	33.84	75	17.07	33.80	24.60	335	0.26
69	17.13	33.82	100	16.80	33.76	24.63	332	0.34
78	17.02	33.78	150	14.59	33.68	25.07	290	0.51
88	16.81	33.71	200	11.13	33.49	25.60	240	0.65
98	16.80	33.75	250	9.23	33.77	26.14	188	0.76
123	16.29	33.82	300	8.18	33.88	26.39	164	0.85
153	14.26	33.66	400	6.80	34.00	26.68	137	1.01
202	10.87	33.49	500	5.68	34.14	26.94	112	1.14
260	8.98	33.80	600	5.20	34.24	27.07	100	1.25
364	7.22	33.96	700	4.91	34.35	27.19	89	1.35
482	5.73	34.11	800	4.65	34.42	27.28	80	1.44
			1000	3.94	34.46	27.38	71	1.61
501	5.68	34.14						
603	5.18	34.24						
700	4.91	34.35						
754	4.80	34.38						
801	4.64	34.42						
851	4.42	34.39						
900	4.36	34.44						
949	4.06	34.44						
998	3.94	34.46						
1047	3.83	34.48						
1100	3.67	34.49						
1200	3.44	34.47						

103.30

E. W. SCRIPPS; April 19, 1954; 1902 GCT; $31^{\circ}05'N$, $116^{\circ}25'W$; sounding, 33 fm; wind, 270° , force 2; weather, overcast; sea, moderate; wire angle, 00° .

0	12.08	33.62	0	12.08	33.62	25.52	247	0.00
10	11.52	33.64	10	11.52	33.64	25.64	236	0.02
15	11.02	33.51	20	10.59	33.60	25.78	222	0.05
20	10.59	33.60	30	10.02	33.62	25.89	212	0.07
25	10.28	33.59	50	9.14	33.66	26.07	195	0.11
30	10.02	33.62						
35	9.64	33.62						
40	9.61	33.66						
50	9.14	33.66						

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δ_T $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

E. W. SCRIPPS; April 20, 1954; 0105 GCT; 30°45'N, 117°17.5'W; sounding, 850 fm; wind, 280°, force 3; weather, overcast; sea, moderate; wire angle, 11°.

0	15.1	33.21	0	15.1	33.21	24.59	336	0.00
10	15.00	33.24	10	15.00	33.24	24.64	331	0.03
30	14.92	33.19	20	14.93	33.22	24.64	331	0.07
40	14.91	33.19	30	14.92	33.19	24.62	333	0.10
50	14.42	33.19	50	14.42	33.19	24.72	323	0.17
60	13.13	33.13	75	11.98	33.07	25.12	285	0.24
70	12.45	33.10	100	10.24	33.23	25.55	244	0.31
79	11.56	33.05	150	9.05	33.84	26.22	181	0.42
88	10.86	33.07	200	8.61	34.07	26.47	157	0.50
98	10.32	33.20	250	7.61	34.04	26.60	145	0.58
121	9.36	33.44	300	7.28	34.13	26.72	133	0.65
149	9.08	33.84	400	6.81	34.28	26.90	116	0.78
196	8.67	34.07	500	6.15	34.35	27.04	103	0.90
252	7.58	34.04	600	(5.62)	(34.38)	(27.13)	(94)	(1.00)
351	7.09	34.22						
466	6.38	34.33						
588	5.70	34.38						

E. W. SCRIPPS; April 20, 1954; 1302, 1325 GCT; 30°06'N, 118°25'W; sounding, 1750 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 10°, 11°.

0	15.1	33.17	0	15.1	33.17	24.56	339	0.00
10	15.14	33.17	10	15.14	33.17	24.55	340	0.03
30	15.08	33.14	20	15.12	33.16	24.55	340	0.07
40	14.57	33.10	30	15.08	33.14	24.54	340	0.10
50	14.34	33.11	50	14.34	33.11	24.68	327	0.17
60	14.05	33.09	75	14.09	33.18	24.78	318	0.25
			100	12.00	33.13	25.16	281	0.32
70	14.16	33.19	150	9.71	33.39	25.77	223	0.45
80	13.92	33.15	200	8.70	33.85	26.29	174	0.55
90	12.95	33.10	250	7.88	33.98	26.51	153	0.64
99	12.08	33.13	300	7.58	34.12	26.67	138	0.71
123	10.68	33.24	400	7.00	34.23	26.83	123	0.85
152	9.66	33.40	500	6.30	34.22	26.92	114	0.97
199	8.76	33.84	600	(5.72)	(34.39)	(27.13)	(94)	(1.08)
257	7.80	34.00						
357	7.35	34.25						
473	6.46	34.21						
595	5.76	34.38						

E. W. SCRIPPS; April 17, 1954; 1158 GCT; 29°25'N, 119°43'W; sounding, 1800 fm; wind, 280°, force 4; weather, overcast; sea, rough; wire angle, 12°.

0	15.6	33.26	0	15.6	33.26	24.52	342	0.00
10	15.54	33.22	10	15.54	33.22	24.50	344	0.03
30	15.38	33.24	20	15.42	33.23	24.54	340	0.07
40	15.36	33.22	30	15.38	33.24	24.55	340	0.10
50	15.24	33.19	50	15.24	33.19	24.55	340	0.17
59	14.78	33.13	75	13.93	33.03	24.70	325	0.25
68	14.21	33.04	100	13.08	33.13	24.95	301	0.33
78	13.82	33.03	150	10.33	33.31	25.60	240	0.47
88	13.40	33.04	200	9.19	33.82	26.19	184	0.58
97	13.23	33.12	250	8.48	34.09	26.51	153	0.66
120	11.51	33.17	300	8.00	34.14	26.62	143	0.74
149	10.34	33.30	400	7.27	34.21	26.78	128	0.88
196	9.24	33.78	500	6.57	34.29	26.94	112	1.01
253	8.42	34.10	600	(5.89)	(34.29)	(27.02)	(105)	(1.12)
353	7.63	34.17						
469	6.79	34.29						
593	5.95	34.29						

103.80

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OBSERVED			INTERPOLATED			COMPUTED		
Z	T	S	Z	T	S	σ_t	${}^5\delta T_{cm/g}$	ΔD
m	°C	%	m	°C	%	g/L	$10^{-5} cm^3/g$	dyn. m

107.35

E. W. SCRIPPS; April 19, 1954; 0923 GCT; 30° 15'N, 116° 25.5'W; sounding, 900 fm; wind, 280°, force 3; weather, overcast; sea, rough; wire angle, 18°.

0	15.2	33.19	0	15.2	33.19	24.55	340	0.00
10	15.18	33.31	10	15.18	33.31	24.65	330	0.03
29	14.32	33.26	20	14.79	33.29	24.72	323	0.07
39	12.85	33.21	30	14.24	33.26	24.81	315	0.10
48	12.28	33.24	50	12.18	33.25	25.22	276	0.16
58	11.58	33.29	75	10.90	33.49	25.64	236	0.22
67	11.17	33.34	100	9.39	33.52	25.92	209	0.28
76	10.86	33.49	150	8.91	33.89	26.28	175	0.38
85	10.09	33.42	200	8.67	34.13	26.51	153	0.46
94	9.56	33.44	250	8.18	34.20	26.64	141	0.53
116	9.15	33.68	300	7.94	34.34	26.79	127	0.60
142	8.94	33.83	400	7.12	34.29	26.86	120	0.73
186	8.79	34.11	500	6.29	34.29	26.98	109	0.85
240	8.22	34.18	600	(5.61)	(34.36)	(27.12)	(95)	(0.96)
336	7.74	34.38						
445	6.71	34.27						
565	5.82	34.34						

107.50

E. W. SCRIPPS; April 18, 1954; 2339 GCT; 29° 51.5'N, 117° 24'W; sounding, 1250 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 15°.

0	15.5	33.26	0	15.5	33.26	24.54	340	0.00
10	15.46	33.25	10	15.46	33.25	24.54	340	0.03
30	15.24	33.21	20	15.39	33.22	24.54	340	0.07
40	15.00	33.33	30	15.24	33.21	24.56	339	0.10
49	14.83	33.30	50	14.81	33.30	24.72	323	0.17
58	14.79	33.30	75	13.82	33.25	24.89	307	0.25
68	14.32	33.30	100	11.05	33.14	25.34	264	0.32
78	13.56	33.21	150	9.42	33.73	26.08	194	0.44
88	12.22	33.16	200	8.99	33.99	26.35	168	0.53
97	11.22	33.13	250	8.48	34.17	26.57	148	0.61
120	10.18	33.41	300	7.93	34.24	26.71	134	0.68
149	9.43	33.73	400	7.08	34.31	26.89	117	0.81
196	9.03	33.97	500	(6.35)	(34.36)	(27.02)	(105)	(0.93)
254	8.42	34.18						
354	7.43	34.28						
470	6.56	34.35						

107.70

E. W. SCRIPPS; April 18, 1954; 0549 GCT; 29° 05'N, 118° 43'W; sounding, 1700 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 14°.

0	15.8	33.33	0	15.8	33.33	24.53	341	0.00
10	15.72	33.30	10	15.72	33.30	24.52	342	0.03
30	15.65	33.34	20	15.70	33.32	24.54	340	0.07
39	15.58	33.36	30	15.65	33.34	24.57	338	0.10
49	15.50	33.25	50	15.49	33.25	24.54	340	0.17
58	15.38	33.30	75	14.34	33.28	24.81	315	0.25
68	15.06	33.29	100	12.60	33.23	25.12	285	0.33
77	14.28	33.28	150	9.60	33.54	25.90	211	0.45
86	13.72	33.22	200	(8.63)	(33.84)	(26.29)	(174)	(0.55)
96	12.90	33.22	250	(8.02)	(33.96)	(26.48)	(156)	(0.64)
119	11.02	33.30	300	(7.59)	(34.07)	(26.62)	(143)	(0.71)
147	9.68	33.50	400	6.99	34.25	26.85	121	(0.85)
193	8.76	33.82	500	(6.32)	(34.33)	(27.00)	(107)	(0.97)
349	7.25	34.17						
374p	7.12	34.27r						
465	6.54	34.31						

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ _t g/L	δ _T 10 ⁻⁵ cm ³ /g	ΔD dyn. m
0	16.6	33.43	0	16.6	33.43	24.42	352	0.00

SPENCER F. BAIRD; April 22, 1954; 1300, 1547 GCT; 26° 57.5'N, 121° 35'W;
sounding, 2250 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle,
03°, 08°.

0	16.6	33.43	0	16.6	33.43	24.42	352	0.00
10	16.54	33.42	10	16.54	33.42	24.43	351	0.03
30	16.36	33.41	20	16.48	33.41	24.44	350	0.07
40	16.20	33.36	30	16.36	33.41	24.46	348	0.10
50	16.08	33.34	50	16.08	33.34	24.47	347	0.17
60	15.99	33.33	75	15.28	33.37	24.68	327	0.26
70	15.44	33.37	100	13.84	33.29	24.92	304	0.34
80	15.13	33.37	150	11.50	33.72	25.71	229	0.47
90	14.68	33.34	200	10.68	34.12	26.17	185	0.58
100	13.84	33.29	250	10.02	34.32	26.44	160	0.67
125	12.20	33.33	300	9.42	34.32	26.54	150	0.75
155	11.40	33.81	400	8.13	34.32	26.74	131	0.90
205	10.60	34.15	500	7.03	34.34	26.92	114	1.03
266	9.86	34.32	600	6.20	34.36	27.04	103	1.14
371	8.50	34.32	700	5.50	34.38	27.15	92	1.25
491	7.10	34.32	800	5.05	34.43	27.24	84	1.35
616	6.10	34.37	1000	4.26	34.45	27.34	74	1.52
			1200	3.70	34.52	27.46	64	1.68
519	6.92	34.34	1500	2.95	34.56	27.55	54	1.89
623	6.03	34.35						
723	5.37	34.39						
828	4.96	34.43						
928	4.50	34.43						
1032	4.18	34.47						
1133	3.84	34.51						
1238	3.62	34.52						
1338	3.36	34.53						
1443	3.08	34.52						
1554	2.88	34.58						

S10

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OBSERVED			INTERPOLATED			COMPUTED		
Z	T	S	Z	T	S	σ_t	$\delta T \cdot 10^5 \text{ cm}^3/\text{g}$	ΔD
m	°C	%	m	°C	%	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn.m

110.150

SPENCER F. BAIRD; April 21, 1954; 1928, 2215 GCT; 25°56'N, 123°32.5'W; sounding, 2265 fm; wind, 340°, force 2; weather, overcast; sea, rough; wire angle, 11°, 20°.

0	17.1	33.68	0	17.1	33.68	24.49	345	0.00
10	17.18	33.67	10	17.18	33.67	24.47	347	0.03
30	16.95	33.65	20	17.01	33.65	24.50	344	0.07
39	16.96	33.65	30	16.95	33.65	24.51	343	0.10
49	16.89	33.65	50	16.90	33.65	24.52	342	0.17
60	16.94	33.65	75	17.08	33.70	24.52	342	0.26
68	16.96	33.68	100	16.78	33.66	24.56	339	0.34
79	17.12	33.70	150	13.64	33.50	25.12	285	0.50
89	16.83	33.70	200	10.26	33.63	25.86	215	0.63
99	16.79	33.66	250	9.25	34.03	26.34	169	0.73
123	16.02	33.64	300	8.69	34.16	26.53	151	0.81
152	13.48	33.50	400	7.62	34.24	26.75	130	0.96
200	10.26	33.63	500	6.48	34.28	26.95	111	1.08
259	9.16	34.08	600	5.62	34.34	27.10	97	1.20
361	8.06	34.22	700	5.25	34.39	27.19	89	1.30
479	6.76	34.27	800	4.85	34.42	27.26	82	1.39
602	-	-	1000	(4.12)	(34.46)	(27.37)	(72)	(1.57)
484	6.60	34.26						
585	5.70	34.33						
682	5.30	34.38						
734	5.12	34.40						
783	4.90	34.41u						
831	4.74	34.42						
880	4.56	34.42						

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δT $10^5 \text{ cm}^3/\text{g}$	ΔD dyn. m

120.35

CREST; April 15, 1954; 2337 GCT; 28°03'N, 114°54'W; sounding, 44 fm; wind, 330°, force 1; weather, clear; sea, moderate; wire angle, 02°.

0	15.9	33.40	0	15.9	33.40	24.56	339	0.00
10	15.25	33.40	10	15.25	33.40	24.71	324	0.03
21	14.64	33.44	20	14.70	33.44	24.86	310	0.06
31	13.77	33.41	30	13.80	33.41	25.02	295	0.10
36	13.73	33.41	50	11.04	33.38	25.53	246	0.15
42	12.09	33.40	75	(10.50)	(33.75)	(25.91)	(210)	(0.21)
47	11.10	33.35						
52	11.00	33.49						
57	10.70	33.57						
62	10.50	33.66						
68	10.65	33.74						
73	10.56	33.75						

120.50

CREST; April 15, 1954; 1126 GCT; 27°31'N, 115°52'W; sounding, 2200 fm; wind, 340°, force 3; weather, overcast; sea, slight; wire angle, 17°.

0	15.3	33.40	0	15.3	33.40	24.69	326	0.00
10	14.77	33.41	10	14.77	33.41	24.82	314	0.03
30	14.29	33.52	20	14.47	33.45	24.91	305	0.06
45	14.04	33.57	30	14.29	33.52	25.00	297	0.09
60	13.18	33.60	50	13.76	33.58	25.16	281	0.15
74	11.51	33.62	75	11.41	33.62	25.65	235	0.22
88	10.36	33.78	100	9.80	33.82	26.09	193	0.27
102	9.76	33.83	150	9.40	34.15	26.41	163	0.36
122	9.50	33.97	200	8.73	34.15	26.52	152	0.44
155	9.38	34.15	250	8.38	34.28	26.67	138	0.52
193	8.79	34.15	300	8.03	34.34	26.77	128	0.58
288	8.16	34.34	400	6.83	34.31	26.92	114	0.71
431	6.49	34.31	500	6.22	34.33	27.02	105	0.83
576	6.01	34.38	600	5.90	34.39	27.10	97	0.94
769	4.82	34.43	700	5.27	34.42	27.21	87	1.04
967	4.07	34.47	800	4.69	34.44	27.29	79	1.13
1169	3.48	34.54	1000	3.96	34.48	27.40	69	1.29

120.70

CREST; April 15, 1954; 0010 GCT; 26°52'N, 117°11'W; sounding, 2000 fm; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 12°.

0	16.3	33.48	0	16.3	33.48	24.53	341	0.00
10	16.27	33.45	10	16.27	33.45	24.52	342	0.03
40	17.16	33.94	20	16.34	33.51	24.55	340	0.07
60	16.88	33.94	30	16.40	33.59	24.59	336	0.10
71	15.09	33.63	50	17.12	33.96	24.71	324	0.17
81	13.30	33.47	75	14.15	33.54	25.05	292	0.25
91	12.53	33.41	100	12.07	33.58	25.49	250	0.31
100	12.07	33.58	150	10.95	34.05	26.06	196	0.43
119	11.32	33.88	200	(10.82)	(34.56)	(26.48)	(156)	(0.52)
148	10.98	34.04	250	(10.16)	(34.53)	(26.58)	(146)	(0.59)
198	10.83	34.56	300	(9.54)	(34.51)	(26.67)	(138)	(0.67)
343	9.02	34.50	400	8.32	34.50	26.85	121	(0.80)
490	7.28	34.50	500	7.15	34.50	27.03	104	(0.92)
637	5.82	34.48	600	6.10	34.49	27.16	92	(1.03)
784	5.08	34.43	700	5.48	34.45	27.20	88	(1.13)
982	4.24	34.47	800	5.00	34.43	27.25	83	(1.22)
1183	3.65	34.49	1000	4.20	34.47	27.37	72	(1.40)

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ_t g/L	δT_3 10^{-5} cm/g	ΔD dyn. m

SIO
CCOFI
5404

SPENCER F. BAIRD; April 26-27, 1954; 2055, 0120 GCT; 26°13'N, 118°28.5'W;
sounding, 2550 fm; wind, 320°, force 1; weather, cloudy; sea, slight; wire angle,
12°, 20°.

0	17.9	33.55	0	17.9	33.55	24.21	372	0.00
10	17.02	33.43	10	17.02	33.43	24.33	360	0.04
30	15.85	33.28	20	16.13	33.31	24.44	350	0.07
40	15.68	33.28	30	15.85	33.28	24.48	346	0.11
49	15.14	33.22	50	15.08	33.21	24.60	335	0.18
59	14.58	33.13	75	13.04	33.15	24.97	300	0.26
69	13.56	33.13	100	11.13	33.39	25.52	247	0.32
78	12.88	33.18	150	9.54	33.70	26.03	199	0.44
88	12.74	33.30	200	9.22	34.10	26.40	164	0.53
97	11.32	33.37	250	9.07	34.22	26.52	152	0.61
121	10.46	33.51	300	8.61	34.29	26.64	141	0.69
149	9.57	33.69	400	7.57	34.34	26.84	122	0.82
197	9.24	34.09	500	6.62	34.36	26.99	108	0.95
254	9.03	34.23	600	5.99	34.39	27.09	98	1.06
355	8.00	34.33	700	5.38	34.42	27.19	89	1.16
470	7.04	34.34	800	4.78	34.44	27.28	80	1.25
592	6.06	34.38	1000	4.00	34.51	27.42	67	1.42
			1200	3.49	34.54	27.49	60	1.56
487	6.75	34.36	1500	(2.85)	(34.60)	(27.60)	(50)	(1.76)
584	6.02	34.40						
681	5.48	34.42						
783	4.86	34.44						
880	4.44	34.45						
980	4.06	34.50						
1078	3.81	34.52						
1181	3.52	34.54						
1279	3.29	34.55						
1383	3.04	34.58						
1492	2.88	34.60						

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5404

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ_t g/L	δT_3 10^{-5} cm/g	ΔD dyn. m

120.120

SPENCER F. BAIRD; April 28, 1954; 1329, 1511 GCT; 25°13'N, 120°20.5'W; sounding, 2165 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 14°, 27°.

0	18.1	33.65	0	18.1	33.65	24.23	370	0.00
10	18.18	33.64	10	18.18	33.64	24.21	372	0.04
29	17.38	33.61	20	17.71	33.62	24.30	363	0.07
39	17.00	33.56	30	17.33	33.61	24.39	355	0.11
48	16.88	33.51	50	16.84	33.51	24.43	351	0.18
57	16.72	33.55	75	16.04	33.50	24.60	335	0.27
67	16.62	33.52	100	13.41	33.39	25.08	289	0.34
76	15.91	33.50	150	10.72	33.68	25.82	219	0.47
86	15.06	33.48	200	9.50	34.01	26.28	175	0.57
96	13.90	33.40	250	9.10	34.16	26.47	157	0.66
119	11.70	33.40	300	8.60	34.24	26.61	144	0.74
147	10.82	33.65	400	7.48	34.32	26.84	122	0.88
194	9.58	33.99	500	6.44	34.34	27.00	107	1.00
250	9.10	34.16	600	5.66	34.35	27.10	97	1.11
349	8.04	34.29	700	5.16	34.39	27.20	88	1.21
465	6.68	34.33	800	4.77	34.41	27.26	82	1.30
596	-	34.40	1000	4.06	34.49	27.40	69	1.47
			1200	3.50	34.49	27.45	64	1.62
471	6.82	34.34	1500	(2.89)	(34.54)	(27.55)	(55)	(1.83)
567	5.88	34.34						
661	5.34	34.37						
759	4.92	34.41						
852	4.59	34.42						
951	4.26	34.49						
1045	3.90	34.49						
1145	3.64	34.49						
1241	3.40	34.50						
1343	3.15	34.53						
1450	2.94	34.54						

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	$10^5 T_3$ cm/g	ΔD dyn. m

SIO
CCOFI
5404

150
120.50

SPENCER F. BAIRD; April 30, 1954; 1627, 1942 GCT; 24°09'N, 122°07'W; sounding,
2305 fm; wind, 340°, force 3; weather, sky obscured; sea, moderate; wire angle, 06°,
25°.

0	18.3	33.84	0	18.3	33.84	24.33	360	0.00
10	18.45	33.82	10	18.45	33.82	24.28	365	0.04
31	18.44	33.84	20	18.46	33.83	24.28	365	0.07
40	17.88	33.75	30	18.45	33.84	24.29	364	0.11
50	17.48	33.66	50	17.48	33.66	24.39	355	0.18
60	17.38	33.68	75	17.63	33.86	24.51	343	0.27
71	17.42	33.75	100	17.07	33.98	24.74	321	0.35
80	18.04	34.03	150	14.00	33.81	25.29	269	0.50
89	18.18	34.18	200	10.19	33.76	25.98	204	0.62
98	17.27	34.00	250	9.57	34.11	26.35	168	0.72
124	15.78	33.87	300	8.98	34.27	26.57	148	0.80
153	13.76	33.80	400	7.72	34.37	26.84	122	0.94
202	10.10	33.76	500	6.74	34.41	27.01	106	1.06
261	9.47	34.20	600	5.99	34.40	27.10	97	1.17
363	8.12	34.34	700	5.40	34.41	27.18	90	1.27
482	7.05u	34.43u	800	4.83	34.44	27.27	81	1.37
606	5.93u	34.42u	1000	4.21	34.49	27.38	71	1.54
472	6.94u	34.38u						
568	6.18u	34.38u						
662	5.62	34.40						
760	5.00	34.43						
856	4.66	34.46						
955	4.35	34.49						
1051	4.04	34.49						
1153	3.73	34.51						
1250	3.51	34.53						

CREST; April 14, 1954; 0332 GCT; 27°18'N, 114°51.5'W; sounding, 211 fm; wind,
330°, force 4; weather, clear; sea, moderate; wire angle, 28°.

123.40

0	14.0	33.40	0	14.0	33.40	24.97	300	0.00
10	13.98	33.39	10	13.98	33.39	24.97	300	0.03
19	13.89	33.37	20	13.84	33.37	24.98	299	0.06
28	13.17	33.35	30	12.75	33.36	25.19	279	0.09
37	11.20	33.47	50	10.48	33.47	25.70	230	0.14
46	10.62	33.43	75	9.78	33.75	26.03	199	0.19
54	10.31	33.57	100	10.95	34.44	26.37	166	0.24
62	10.10	33.60	150	10.54	34.39	26.40	164	0.32
69	9.60	33.57	200	10.21	34.48	26.53	151	0.40
77	9.92	33.85	250	9.67	34.49	26.63	142	0.48
85	10.62	34.10	300	8.94	34.49	26.75	130	0.55
94	10.99	34.45						
126	10.74	34.36						
178	10.38	34.45						
232	9.92	34.49						
308	8.82	34.49						

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5404

	OBSERVED			INTERPOLATED			COMPUTED		
	Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δT^3 $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

123.60

CREST; April 14, 1954; 1643 GCT; 26°38'N, 116°09'W; sounding, 2050 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 08°.

0	16.3	33.41	0	16.3	33.41	24.48	346	0.00
10	16.18	33.44	10	16.18	33.44	24.53	341	0.03
30	16.40	33.57	20	16.27	33.49	24.55	340	0.07
45	16.59	33.68	30	16.40	33.57	24.58	337	0.10
55	16.31	33.66	50	16.49	33.67	24.63	332	0.17
66	16.30	33.69	75	15.70	33.67	24.81	315	0.25
87	14.30	33.64	100	13.17	33.71	25.38	260	0.32
102	13.10	33.74	150	11.50	34.37	26.21	182	0.44
112	13.03	33.93	200	11.10	34.40	26.31	172	0.53
136	12.00	34.43	250	10.84	34.40	26.36	167	0.61
166	11.16	34.31	300	10.05	34.39	26.49	155	0.70
220	11.09	34.43	400	8.54	34.53	26.84	122	0.84
282	10.32	34.38	500	7.00	34.43	26.99	108	0.96
393	8.66	34.53	600	6.02	34.40	27.10	97	1.08
521	6.69	34.42						
659	5.69	34.39						

127.34

CREST; April 13, 1954; 0525 GCT; 26°54'N, 114.08'W; sounding, 50 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°.

0	13.67	33.35	0	13.67	33.35	25.00	297	0.00
5	13.68	33.39	10	13.65	33.37	25.02	295	0.03
10	13.65	33.37	20	13.44	33.39	25.08	289	0.06
15	13.57	33.37	30	11.39	33.37	25.46	253	0.09
20	13.44	33.39	50	12.01	33.93	25.78	222	0.13
22	13.35	33.40	75	11.3	34.12	26.06	196	0.19
24	13.02	33.39						
26	12.36	33.37						
28	11.62	33.32						
30	11.39	33.37						
35	11.78	33.57						
40	12.21	33.87						
50	12.01	33.93						
60	11.68	34.02						
70	11.36	34.11						
81	11.3	34.13						

127.50

CREST; April 12, 1954; 1708, 1730, 1805 GCT; 26°24'N, 115°07'W; sounding, 1600 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 29°, 30°, 28°.

0	15.7	33.44	0	15.7	33.44	24.64	331	0.00
10	15.64	33.39	10	15.64	33.39	24.61	334	0.03
27	15.59	33.40	20	15.60	33.40	24.63	332	0.07
			30	15.56	33.40	24.64	331	0.10
42	15.44	33.39	50	15.28	33.36	24.67	328	0.17
51	15.24	33.36	75	15.00	33.37	24.74	321	0.25
59	15.07	33.34	100	12.70	33.31	25.16	281	0.32
			150	9.68	33.60	25.93	208	0.45
75	15.00	33.37	200	9.00	34.10	26.43	161	0.54
88	14.63	33.34	250	9.20	34.36	26.61	144	0.62
94	13.32	33.30	300	8.92	34.44	26.71	134	0.69
116	11.49	33.34	400	7.87	34.49	26.91	115	0.82
140	10.09	33.51	500	6.80	34.47	27.05	102	0.94
183	8.82	33.88						
235	9.27	34.33						
329	8.72	34.47						
435	7.43	34.49						
552	6.32	34.45						

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	$\delta_T \cdot 10^5$ cm ³ /g	ΔD dyn. m

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CREST; April 11, 1954; 1100 GCT; 26°29'N, 113°30.5'W; sounding, 43 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 12°.

130.30

0	14.89	33.58	0	14.89	33.58	24.92	304	0.00
10	14.85	33.58	10	14.85	33.58	24.93	303	0.03
20	14.28	33.54	20	14.28	33.54	25.02	295	0.06
30	13.61	33.62	30	13.61	33.62	25.22	276	0.09
40	13.10	33.68	50	11.94	33.62	25.55	244	0.14
50	11.94	33.62						

CREST; April 11, 1954; 1710 GCT; 26°09'N, 114°06'W; sounding, 1300 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 15°.

130.40

0	15.1	33.37	0	15.1	33.37	24.72	323	0.00
10	15.05	33.38	10	15.05	33.38	24.73	322	0.03
30	14.83	33.36	20	14.96	33.38	24.75	320	0.06
40	13.04	33.28	30	14.83	33.36	24.77	319	0.10
60	11.45	33.31	50	12.03	33.29	25.28	270	0.16
80	10.50	33.46	75	10.62	33.41	25.63	237	0.22
90	11.30	33.95	100	11.04	33.94	25.96	205	0.28
100	11.04	33.94	150	10.82	34.32	26.30	173	0.37
109	11.11	34.03	200	10.46	34.40	26.42	162	0.46
129	11.13	34.54	250	9.55	34.42	26.59	146	0.54
148	10.83	34.32	300	8.75	34.42	26.72	133	0.61
196	10.50	34.40	400	7.49	34.40	26.90	116	0.74
293	8.83	34.42	500	6.60	34.34	26.97	110	0.86
487	6.71	34.34	600	5.94	34.45	27.15	92	0.97
682	5.48	34.52	700	5.40	34.52	27.27	81	1.06
928	4.37	34.56	800	4.89	34.54	27.35	74	1.15
1180	3.67	34.60	1000	4.10	34.57	27.46	63	1.30

CREST; April 12, 1954; 0457 GCT; 25°29'N, 115°24'W; sounding, 2150 fm; wind, 330°, force 5; weather, partly cloudy; sea, moderate; wire angle, 20°.

130.60

0	18.2	34.22	0	18.2	34.22	24.65	330	0.00
11	18.18	34.22	10	18.18	34.22	24.65	330	0.03
77	15.93	34.03	20	(18.13)	(34.18)	(24.63)	(332)	(0.07)
82	14.77	33.95	30	(18.10)	(34.15)	(24.62)	(333)	(0.10)
86	13.82	33.82	50	(18.09)	(34.10)	(24.58)	(337)	(0.17)
91	13.53	33.90	75	(16.30)	(34.04)	(24.96)	(300)	(0.25)
95	13.36	33.95	100	12.98	34.03	25.67	233	(0.31)
99	12.95	34.02	150	11.90	34.54	26.27	176	(0.42)
104	13.08	34.07	200	10.96	34.59	26.48	156	(0.50)
123	12.98	34.59	250	10.28	34.54	26.56	148	(0.58)
150	11.90	34.54	300	9.52	34.51	26.67	138	(0.66)
187	11.16	34.60	400	8.10	34.51	26.89	117	(0.79)
279	9.88	34.52	500	6.93	34.51	27.06	101	(0.91)
418	7.88	34.51	600	6.04	34.51	27.18	90	(1.01)
654	5.62	34.51	700	5.38	34.51	27.26	82	(1.10)
895	4.48	34.52	800	4.86	34.51	27.32	76	(1.19)
1148	3.69	34.64	1000	4.10	34.55	27.44	65	(1.35)

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ_t g/L	δT $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

130.90

SPENCER F. BAIRD; May 6, 1954; 1452, 2352 GCT; 24°27'N, 117°15'W; sounding,
2050 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 22°, 20°.

0	18.6	34.45r	0	18.6	(34.25)	(24.57)	(338)	(0.00)
10	18.71	34.25	10	18.71	34.25	24.54	340	0.03
29	18.71	34.24	20	18.72	34.24	24.53	341	0.06
38	18.64	34.22	30	18.71	34.24	24.53	341	0.10
47	18.63	34.21	50	18.68	34.21	24.52	342	0.17
56	18.78	34.22	75	18.52	34.26	24.60	335	0.26
66	18.81	34.27	100	15.92	33.89	24.93	303	0.34
75	18.52	34.26	150	11.26	34.23	26.15	187	0.46
84	17.62	34.25	200	10.37	34.26	26.33	170	0.55
93	16.86	34.05	250	9.72	34.31	26.48	156	0.64
116	13.88	33.79	300	9.07	34.37	26.64	141	0.71
142	11.53	34.22	400	8.02	34.41	26.83	123	0.85
185	10.59	34.25	500	6.93	34.43	27.00	107	0.98
238	9.90	33.76	600	6.13	34.45	27.12	95	1.08
333	8.69	34.39	700	5.60	34.49	27.22	86	1.18
443	7.60	34.38u	800	5.08	34.51	27.30	78	1.27
564	6.34u	34.42u	1000	4.29	34.52	27.40	69	1.44
488	7.08	34.46u						
586	6.31u	34.47u						
683	5.68	34.49						
782	5.18	34.51						
876	4.73	34.57r						
979	4.36	34.52						
1075	4.04	34.54						
1178	3.77	34.38r						
1277	3.51	34.21r						
1381	3.27	33.75r						

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ_t g/L	δT $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

SIO
CCOFI
5404

SPENCER F. BAIRD; May 5-6, 1954; 2056, 0035 GCT; 23°31'N, 119°12'W; sounding,
2205 fm; wind, 350°, force 1; weather, cloudy; sea, moderate; wire angle, 20°, 20°.
 0 19.7 33.95 0 19.7 33.95 24.06 386 0.00
 10 19.26 33.96 10 19.26 33.96 24.18 375 0.04
 29 19.20 33.98 20 19.21 33.98 24.21 372 0.08
 38 19.18 33.96 30 19.20 33.98 24.21 372 0.11
 48 18.76 33.95 50 18.71 33.95 24.31 362 0.19
 57 18.58 33.91 75 16.96 33.78 24.61 334 0.27
 67 17.73 33.80 100 14.19 33.57 25.06 291 0.35
 76 16.86 33.78 150 11.16 33.89 25.90 211 0.48
 85 15.70 33.64 200 9.94 34.22 26.38 166 0.58
 95 14.66 33.57 250 9.20 34.32 26.57 148 0.66
 118 12.44 33.60 300 8.64 34.36 26.69 136 0.73
 146 11.27 33.86 400 7.67 34.41 26.88 118 0.86
 191 10.10 34.18 500 6.91 34.43 27.00 107 0.98
 245 9.28 34.31 600 6.11 34.43 27.11 96 1.09
 342 8.22 34.38 700 5.54 34.43 27.18 90 1.19
 454 7.13 34.43 800 4.99 34.43 27.25 83 1.29
 1000 4.23 34.51 27.39 70 1.46
 170 10.07r 34.14r
 283 8.67r 34.11r
 490 7.00 34.36r
 591 6.14 34.43
 686 5.62 34.43
 787 5.03 34.43
 883 4.65 34.45
 986 4.29 34.51
 1085 3.97 34.51
 1189 3.67 34.56r
 1287 3.42 34.52

S10

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5404

130.150

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δT_3 $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

SPENCER F. BAIRD; May 4, 1954; 0513, 0653 GCT; 22°29'N, 121°21'W; sounding, 2250 fm; wind, 360°, force 2; weather, overcast; sea, slight; wire angle, 15°, 11°.								
0 18.6 33.80 0 18.6 33.80 24.23 370 0.00								
10 18.72 33.78 10 18.72 33.78 24.18 375 0.04								
29 18.68 33.82 20 18.70 33.81 24.21 372 0.07								
40 18.65 33.80 30 18.68 33.82 24.22 371 0.11								
48 18.11 33.74 50 18.10 33.74 24.30 363 0.18								
58 18.10 33.77 75 17.50 33.64 24.37 357 0.28								
68 18.04 33.78 100 15.16 33.51 24.81 315 0.36								
77 16.93 33.62 150 11.41 33.55 25.59 240 0.50								
88 16.10 33.55 200 10.40 34.06 26.17 185 0.61								
96 15.44 33.52 250 9.50 34.25 26.47 157 0.70								
121 13.54 33.51 300 8.97 34.33 26.62 143 0.78								
149 11.44 33.55 400 8.03 34.36 26.79 127 0.92								
198 10.44 34.05 500 6.93 34.38 26.96 110 1.04								
254 9.44 34.26 600 6.03 34.42 27.11 96 1.16								
355 8.51 34.36 700 5.40 34.42 27.19 89 1.26								
470 7.12 34.36 800 5.00 34.43 27.25 83 1.35								
591 6.04 34.42 1000 4.24 34.47 27.36 73 1.53								
			1200 3.67 34.52 27.46 63 1.68					
506 6.88 34.39 1500 2.90 34.56 27.57 53 1.89								
609 6.03 34.42								
707 5.38 34.42								
811 4.95 34.43								
910 4.52 34.47								
1014 4.19 34.47								
1114 3.88 34.52								
1218 3.62 34.52								
1317 3.32 34.53								
1422 3.08 34.55								
1532 2.86 34.58								

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δT^3 $10^5 \text{ cm}^3/\text{g}$	ΔD dyn.m

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5404

SPENCER F. BAIRD; May 2, 1954; 0322, 0505 GCT; 21° 32'N, 123° 00'W; sounding,
2280 fm; wind, 040°, force 3; weather, overcast; sea, rough; wire angle, 16°, 18°.

0	19.4	33.87	0	19.4	33.87	24.08	384	0.00
11	19.52	33.87	10	19.52	33.87	24.05	387	0.04
30	19.44	33.89	20	19.47	33.88	24.07	385	0.08
39	19.43	33.87	30	19.44	33.89	24.08	384	0.12
48	19.35	33.87	50	19.33	33.88	24.10	382	0.19
58	19.27	33.98	75	19.12	34.08	24.31	362	0.29
68	19.17	34.11	100	18.48	33.72	24.19	374	0.38
78	19.10	34.04	150	14.60	33.64	25.03	294	0.55
88	18.79	33.88	200	11.35	34.19	26.10	192	0.67
97	18.58	33.76	250	9.81	34.34	26.49	155	0.76
121	17.33	33.57	300	9.08	34.39	26.65	140	0.84
149	14.62	33.63	400	7.93	34.43	26.86	120	0.97
195	11.58	34.16	500	6.88	34.43	27.01	106	1.10
251	9.78	34.34	600	6.23	34.43	27.09	98	1.20
351	8.50	34.42	700	5.58	34.44	27.19	89	1.31
466	7.26	34.43	800	5.14	34.48	27.27	81	1.40
589	6.31	34.44	1000	4.40	34.54	27.40	69	1.57
492	6.94	34.42						
590	6.29	34.42						
686	5.64	34.44						
786	5.21	34.48						
882	4.76	34.52						
983	4.43	34.53						
1081	4.12	34.56						
1184	3.84	34.56						

130.180

CREST; April 11, 1954; 0237 GCT; 25° 56'N, 113° 08.5'W; sounding, 100 fm; wind, 290°,
force 4; weather, partly cloudy; sea, moderate; wire angle, 02°.

0	16.5	33.81	0	16.5	33.81	24.74	321	0.00
10	16.27	33.84	10	16.27	33.84	24.81	315	0.03
15	16.28	33.87	20	15.78	33.86	24.94	302	0.07
20	15.78	33.86	30	15.70	33.84	24.94	302	0.10
25	15.73	33.86	50	13.51	33.86	25.43	256	0.16
31	15.65	33.84	75	12.69	34.00	25.70	230	0.22
36	14.68	33.80	100	12.04	34.28	26.04	198	0.27
41	14.04	-	150	11.7	34.60	26.36	168	0.37
46	13.54	33.96						
51	13.50	33.86						
56	13.41	33.92						
61	13.15	33.96						
72	12.79	33.99						
92	12.12	34.22						
112	11.96	34.37						
132	11.79	34.54						
153	11.7	34.61						

133.30

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ_t g/L	δT_{3} 10^{-5} cm/g	ΔD dyn. m

133.50

CREST; April 10, 1954; 1427 GCT; 25°14.5'N, 114°24'W; sounding, 1900 fm; wind, 020°, force 4; weather, overcast; sea, rough; wire angle, 13°.

0	17.9	34.02	0	17.9	34.02	24.57	338	0.00
10	17.87	34.06	10	17.87	34.06	24.60	335	0.03
50	17.22	33.96	20	17.83	34.05	24.61	334	0.07
60	15.58	33.86	30	17.81	34.03	24.60	335	0.10
66	14.59	33.80	50	17.22	33.96	24.68	327	0.17
71	13.90	33.72	75	13.64	33.72	25.29	269	0.24
81	13.26	33.73	100	11.90	33.81	25.71	229	0.31
90	12.38	33.78	150	11.12	34.32	26.24	179	0.41
100	11.90	-	200	10.76	34.47	26.44	160	0.50
119	11.40	33.87	250	10.42	34.58	26.57	148	0.58
147	11.15	34.31	300	9.62	34.58	26.71	134	0.65
186	10.85	34.42	400	8.40	34.57	26.90	116	0.78
241	10.52	34.58	500	7.00	34.49	27.04	103	0.90
340	9.09	34.58	600	6.21	34.49	27.15	92	1.00
437	8.00	34.56						
535	6.60	34.47						
635	6.06	34.52						

137.23

CREST; April 9, 1954; 0707, 0720 GCT; 25°34'N, 112°19'W; sounding, 42 fm; wind, 090°, force 2; weather, clear; sea, moderate; wire angle, 00°, 00°.

0	16.30	33.87	0	16.30	33.87	24.83	313	0.00
5	16.32	33.94	10	16.29	33.94	24.89	307	0.03
10	16.29	-	20	15.78	33.91	24.98	299	0.06
			30	15.17	34.02	25.20	278	0.09
15	16.32	33.91	50	13.80	34.25	25.67	233	0.14
20	15.78	33.91						
26	15.56	33.94						
36	14.36	34.14						
46	13.84	34.22						
56	13.76	34.30						

137.40

CREST; April 9, 1954; 1708, 1735 GCT; 25°00'N, 113°23.5'W; sounding, 1868 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 05°, 00°.

0	16.1	33.64	0	16.1	33.64	24.70	325	0.00
10	15.92	33.64	10	15.92	33.64	24.74	321	0.03
26	15.93	33.64	20	15.91	33.64	24.74	321	0.07
30	15.95	33.70	30	15.95	33.70	24.78	318	0.10
40	15.83	33.71	50	13.64	33.43	25.07	290	0.16
46	14.52	33.46	75	12.69	33.54	25.34	264	0.23
			100	11.92	33.90	25.77	223	0.29
52	13.38	33.43	150	11.15	34.39	26.29	174	0.39
61	12.98	33.42	200	10.66	34.54	26.50	154	0.47
102	11.82	33.93	250	10.02	34.53	26.60	145	0.55
149	11.15	34.38	300	9.44	34.52	26.69	136	0.62
198	10.68	34.54	400	8.09	34.55	26.93	113	0.76
295	9.50	34.52	500	6.80	34.47	27.05	102	0.87
393	8.20	34.55	600	6.12	34.47	27.14	93	0.98
493	6.88	34.47						
595	6.15	34.47						
647	5.82	34.54						

OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ _t g/L	δT ₃ 10 ⁻⁵ cm ³ /g	ΔD dyn. m

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CREST; April 10, 1954; 0406 GCT; 24°19.5'N, 114°39.5'W; sounding, 2020 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 13°.

137.60

0	18.6	34.17	0	18.6	34.17	24.51	343	0.00
56	18.38	34.14	10	(18.45)	(34.17)	(24.55)	(340)	(0.03)
65	16.89	33.85	20	(18.41)	(34.17)	(24.56)	(339)	(0.07)
76	15.78	33.77	30	(18.40)	(34.16)	(24.55)	(340)	(0.10)
86	14.32	33.73	50	(18.37)	(34.15)	(24.55)	(340)	(0.17)
96	13.35	33.62	75	16.00	33.77	24.82	314	(0.25)
105	12.60	33.69	100	13.00	33.63	25.35	263	(0.32)
114	11.96	33.71	150	11.26	34.19	26.12	190	(0.44)
124	11.68	33.78	200	10.34	34.31	26.37	166	(0.53)
134	11.40	34.10	250	9.72	34.31	26.48	156	(0.61)
158	11.18	34.22	300	9.18	34.31	26.57	148	(0.69)
196	10.40	34.31	400	8.03	34.46	26.87	119	(0.83)
292	9.25	34.31	500	6.90	34.42	27.00	107	(0.95)
399	8.04	34.46	600	6.10	34.47	27.14	93	(1.06)
518	6.76	34.42						
640	5.86	34.51						

SPENCER F. BAIRD; May 8, 1954; 0120, 0236 GCT; 21°45.5'N, 118°05'W; sounding, 2130 fm; wind, 360°, force 1; weather, overcast; sea, moderate; wire angle, 10°, 10°.

140.120

0	20.7	34.47	0	20.7	34.47	24.19	374	0.00
10	20.72	34.48	10	20.72	34.48	24.19	374	0.04
30	20.62	34.47	20	20.68	34.47	24.20	373	0.07
41	20.57	34.48	30	20.62	34.47	24.21	372	0.11
51	20.30	34.39	50	20.35	34.41	24.24	369	0.19
60	18.72	34.06	75	17.72	33.93	24.54	340	0.28
70	18.16	33.98	100	14.18	33.63	25.11	286	0.35
79	17.17	33.89	150	12.07	34.08	25.88	213	0.48
90	15.68	33.75	200	10.60	34.31	26.33	170	0.58
98	14.42	33.63	250	9.90	34.39	26.51	153	0.66
122	12.63	33.78	300	9.20	34.43	26.66	139	0.74
151	12.02	34.09	400	7.99	34.45	26.87	119	0.87
200	10.60	34.31	500	7.03	34.46	27.01	106	0.99
258	9.80	34.40	600	6.26	34.46	27.11	96	1.10
360	8.45	34.45	700	5.66	34.48	27.21	87	1.20
478	7.26	34.47	800	5.09	34.49	27.28	80	1.30
602	6.24	34.47	1000	4.23	34.52	27.40	69	1.46
			1200	3.61	34.55	27.49	61	1.61
510	6.90	34.45	1500	2.92	34.59	27.59	51	1.81
614	6.13	34.46						
714	5.57	34.48						
817	5.00	34.49						
918	4.52	34.50						
1022	4.18	34.52						
1122	3.83	34.53						
1226	3.56	34.56						
1326	3.35	34.58						
1430	3.07	34.59						
1540	2.83	34.59						

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S %	Z m	T °C	S %	σ_t g/L	δT $10^{-5} \text{ cm}^3/\text{g}$	ΔD dyn. m

140.150

SPENCER F. BAIRD; May 9, 1954; 0637, 0835 GCT; 20°41.5'N, 119°56.5'W; sounding, 2140 fm; wind, 030°, force 2; weather, drizzle; sea, moderate; wire angle, 05°, 00°.

0	21.7	34.47	0	21.7	34.47	23.92	400	0.00
15	21.80	34.44	10	21.84	34.45	23.86	406	0.04
35	20.19	34.42	20	21.17	34.43	24.03	389	0.08
45	19.91	34.24	30	20.42	34.43	24.24	369	0.12
54	19.82	34.27	50	19.87	34.25	24.24	369	0.19
64	19.58	34.23	75	19.13	34.22	24.41	353	0.28
74	19.16	34.22	100	18.51	34.16	24.52	342	0.37
84	19.08	34.27	150	12.10	33.55	25.46	253	0.52
93	18.83	34.21	200	10.85	33.87	25.94	207	0.64
103	18.36	34.13	250	9.92	34.27	26.42	162	0.73
127	15.04	33.66	300	9.05	34.34	26.61	144	0.81
157	11.52	33.54	400	8.01	34.38	26.81	125	0.95
206	10.78	34.10	500	6.83	34.37	26.97	110	1.08
267	9.52	34.30	600	6.14	34.40	27.08	99	1.19
370	8.33	34.38	700	5.57	34.44	27.18	90	1.29
492	6.98	34.38	800	5.08	34.48	27.28	80	1.39
616	6.06	34.40	1000	4.21	34.49	27.38	71	1.56
			1200	3.53	34.49	27.45	64	1.71
519	6.66	34.36	1500	2.82	34.57	27.58	52	1.92
624	5.99	34.42						
723	5.48	34.45						
826	4.94	34.49						
925	4.44	34.50						
1029	4.12	34.49						
1128	3.77	34.50						
1233	3.48	34.49						
1332	3.24	34.57						
1437	2.98	34.56						
1547	2.76	34.58						

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OBSERVED			INTERPOLATED			COMPUTED		
Z m	T °C	S ‰	Z m	T °C	S ‰	σ_t g/L	$\frac{\delta}{10} T^3$ cm/g	ΔD dyn. m

SPENCER F. BAIRD; May 10, 1954; 1610, 1753 GCT; 19°50'N, 121°42'W; sounding,
2370 fm; wind, 040°, force 3; weather, overcast; sea, moderate; wire angle, 20°,
20°.

0	21.3	34.31	0	21.3	34.31	23.91	401	0.00
10	21.47	34.31	10	21.47	34.31	23.86	406	0.04
28	21.04	34.31	20	21.27	34.31	23.92	400	0.08
42	20.46	34.46	30	20.98	34.32	24.00	392	0.12
52	19.93	34.41	50	20.03	34.42	24.33	360	0.20
61	19.62	34.40	75	19.10	34.33	24.50	344	0.28
70	19.35	34.37	100	18.44	34.28	24.63	332	0.37
80	18.87	34.30	150	12.70	33.95	25.66	234	0.51
94	18.55	34.29	200	11.38	34.31	26.19	184	0.62
103	18.39	34.27	250	10.72	34.34	26.33	170	0.71
127	15.62	34.00	300	10.06	34.38	26.48	156	0.80
153	12.54	33.95	400	8.63	34.49	26.80	126	0.94
203	11.32	34.33	500	7.51	34.49	26.97	110	1.07
262	10.56	34.34	600	6.59	34.48	27.09	98	1.18
369	9.07	34.49	700	5.86	34.50	27.20	88	1.28
490	7.61	34.47	800	5.33	34.52	27.28	80	1.39
619	6.50	34.47	1000	4.35	34.56	27.42	67	1.55
			1200	3.66	34.57	27.50	60	1.69
489	7.62	34.51	1500	(2.97)	(34.60)	(27.59)	(51)	(1.88)
587	6.66	34.48						
681	5.96	34.49						
782	5.42	34.52						
877	4.90	34.53						
978	4.46	34.56						
1075	4.07	34.56						
1177	3.74	34.57						
1274	3.48	34.59						
1376	3.22	34.60						
1486	3.00	34.56						

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
60.55-H	IV-12	0730	37°44.5'	123°13.5'	275	300°	6	overcast	moderate	11.58	32.59
60.70-H	11	1550	37°18.0'	124°24.5'	2200	310°	6	overcast	moderate	12.40	33.04
60.80-H	11	1152	36°58.0'	125°04.0'	2500	320°	6	sky obscured	rough	12.26	33.04
60.90-H	11	0815	36°44.0'	125°31.5'	2300	310°	6	cloudy	rough	12.49	33.07
63.52-H	13	1930	37°19.0'	122°36.0'	45	310°	5	cloudy	slight	11.30	32.52
67.55-H	14	0120	36°37.5'	122°27.5'	1300	310°	5	fog	slight	12.12	32.68
70.55-H	8	1930	36°03.0'	122°02.0'	550	310°	8	partly cloudy	rough	11.83	32.98
70.60-H	8	2305	35°53.0'	122°23.0'	1500	310°	8	partly cloudy	rough	12.76	33.07
70.70-H	9	0330	35°33.0'	123°06.0'	2100	310°	6	missing	rough	12.60a)	32.99
70.90-H	10	1115	34°53.0'	124°30.0'	2350	310°	6	missing	rough	12.38	32.75
73.50-H	14	1200	35°37.0'	121°18.5'	70	310°	6	fog	moderate	9.56	33.72
73.60-H	14	1637	35°19.0'	121°58.0'	1500	310°	7	cloudy	rough	12.53	33.22
77.50-H	16	0500	35°04.0'	120°52.0'	70	310°	5	clear	moderate	10.65	33.55
77.65-H	14	2115	34°34.0'	121°55.0'	2150	310°	6	partly cloudy	very rough	13.33	33.30
80.51-H	15	0910	34°26.5'	120°32.5'	49	310°	2	clear	slight	11.26	33.48
80.60-H	15	1350	34°10.0'	121°11.5'	1200	310°	2	cloudy	rough	11.96	33.42
80.80-H	15	2225	33°30.0'	122°33.0'	2200	310°	2	partly cloudy	moderate	13.90	33.26

a) Alternate value, 12.77°C.

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
83.40-H	IV-17	1015	34°14.0'	119°22.0'	19	310°	3	fog	slight	12.50	33.46
83.48-H	17	0335	33°58.5'	119°55.0'	50	310°	6	fog	slight	12.42	33.44
83.55-H	16	2315	33°44.0'	120°24.5'	530	340°	3	cloudy	slight	11.57	33.48
83.70-H	16	1650	33°24.0'	121°23.0'	2050	090°	1	cloudy	slight	12.30	33.30
83.90-H	16	0640	32°33.5'	122°50.0'	2400	290°	3	cloudy	slight	14.34	33.19
85.40-H	8	1130	33°57.5'	119°12.0'	400	340°	4	partly cloudy	slight	12.44	33.48
85.50-H	8	0415	33°37.0'	119°50.5'	170	330°	7	clear	rough	13.69	33.28
85.60-H	7	2125	33°17.0'	120°33.5'	650	310°	7	partly cloudy	rough	13.66	33.31
87.35-H	17	1415	33°50.5'	118°37.0'	230	090°	2	fog	slight	13.34	33.46
87.45-H	17	1943	33°30.5'	119°19.0'	540	340°	5	cloudy	smooth	13.64	33.42
87.55-H	18	0025	33°10.0'	120°00.5'	650	270°	5	cloudy	moderate	13.68	33.30
87.70-H	18	0725	32°36.5'	121°01.5'	-	340°	5	cloudy	moderate	13.49	33.26
87.90-H	18	1730	31°53.0'	122°22.5'	2000+	340°	5	cloudy	slight	14.38	33.12
90.30-H	20	0245	33°24.5'	117°53.5'	350	270°	1	cloudy	smooth	14.20	33.47
90.45-H	19	1925	32°53.5'	118°52.5'	915	310°	3	cloudy	slight	13.82	33.29
90.60-H	19	1115	32°22.0'	119°57.0'	525	310°	4	cloudy	moderate	13.90	33.26
90.80-H	19	0130	31°43.0'	121°16.5'	2050	310°	4	cloudy	slight	14.35	33.39
93.27-E	10	0410	32°56.0'	117°19.0'	50	270°	1	partly cloudy	calm	15.11	33.40
93.35-E	10	1045	32°39.5'	117°51.5'	600	260°	2	partly cloudy	slight	14.44	33.40

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Force	Weather	Sea	10 Meters T	S
93.40-E	IV-10	1430	32°30.0'	118°12.5'	190	310°	2	partly cloudy	slight	14.14	33.40
93.45-E	10	1730	32°22.0'	118°30.0'	850	280°	3	partly cloudy	slight	14.37	33.41
93.55-E	10	1535	31°59.0'	119°14.5'	180	310°	4	partly cloudy	very rough	14.54	33.39
93.60-E	11	0500	31°48.0'	119°35.5'	1800	300°	5	partly cloudy	very rough	14.06	33.35
93.80-E	12	0230	31°02.0'	121°05.0'	2150	260°	5	partly cloudy	very rough	14.65	33.22
97.30-E	13	1700	32°15.5'	117° ^{09.} 49.0'	30	calm		cloudy	slight	13.48	33.44
97.32-E	13	1445	32°12.5'	117°15.5'	750	calm		cloudy	smooth	14.94	33.62
97.45-E	13	0630	31°45.0'	118°08.5'	780	290°	1	cloudy	slight	14.84	-
97.50-E	13	0415	31°35.0'	118°29.0'	2150	310°	3	cloudy	moderate	14.80	33.37
97.55-E	13	0130	31°25.0'	118°50.0'	250	310°	4	cloudy	moderate	14.92a)	33.40
97.70-E	12	1615	30°56.0'	119°48.5'	1800	290°	4	cloudy	moderate	14.77	33.35
97.90-E	12	0415	30°15.0'	121°10.0'	1950	250°	5	missing	very rough	15.16	33.24
100.30-E	15	0330	31°40.5'	116°46.5'	183	180°	1	cloudy	slight	14.50	33.42
100.35-E	15	0625	31°31.0'	117°06.5'	650	180°	1	cloudy	smooth	15.14	33.41
100.40-E	15	0915	31°19.5'	117°26.0'	1100	180°	1	cloudy	slight	15.10	33.40
100.45-E	15	1200	31°09.0'	117°45.0'	700	180°	1	cloudy	slight	14.92	33.42

a) Alternate value, 15.05°C.

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
100.55-E	IV-15	2000	30°49.0'	118°22.0'	1310	180°	1	cloudy	smooth	14.69a)	33.13
100.60-E	15	2245	30°38.5'	118°42.0'	1200	220°	1	cloudy	smooth	14.19	33.18
100.80-E	16	1100	30°04.0'	120°03.5'	2010	calm		cloudy	slight	14.60	33.15
100.100-E	16	2345	29°28.0'	121°22.5'	2000	360°	1	partly cloudy	rough	16.40	33.27
103.35-E	19	2215	30°55.0'	116°45.0'	900	310°	2	cloudy	slight	15.18	-
103.45-E	20	0430	30°35.5'	117°25.0'	1200	270°	2	cloudy	moderate	15.18	-
103.50-E	20	0730	30°25.5'	117°45.0'	1000	270°	2	cloudy	moderate	14.92	-
103.55-E	20	1020	30°15.5'	118°05.0'	1400	270°	2	cloudy	moderate	15.14	-
103.70-E	17	1910	29°44.0'	119°03.0'	1750	240°	4	cloudy	rough	15.22	33.21
103.90-E	17	0620	29°07.5'	120°25.0'	2000	310°	1	cloudy	rough	15.72	33.31
107.32-E	19	0245	30°22.0'	116°11.5'	85	310°	2	cloudy	moderate	13.20	35.55
107.40-E	19	0625	30°07.0'	116°45.0'	400	310°	4	cloudy	rough	15.36	33.21
107.45-E	19	0330	29°59.0'	117°04.5'	780	310°	5	cloudy	rough	15.36	33.27
107.55-E	18	2030	29°43.5'	117°42.5'	1700	310°	4	cloudy	rough	15.45b)	33.31
107.60-E	18	1700	29°32.5'	118°02.5'	1850	270°	4	cloudy	rough	15.34	33.29
107.80-E	18	0010	28°52.0'	119°20.0'	2100	020°	3	cloudy	rough	15.62	33.26
110.35-H	28	1430	29°46.0'	116°00.0'	600	310°	4	partly cloudy	smooth	15.09	33.39

- a) Alternate value, 14.96°C.
 b) Alternate value, 14.94°C.

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
110.45-H	IV-28	2030	29°22.5'	116°33.5'	540	310°	3	partly cloudy	slight	15.80	33.24
110.50-H	28	2310	29°16.5'	117°00.0'	2000	310°	4	partly cloudy	slight	16.36	33.34
110.55-H	29	0130	29°07.5'	117°25.5'	2000	310°	6	partly cloudy	slight	16.07	33.30
110.70-H	29	0810	28°36.0'	118°18.0'	1950	310°	5	missing	slight	16.88	33.40
110.90-H	29	1710	27°54.5'	119°27.0'	2215	310°	5	cloudy	moderate	16.00	33.24
113.30-H	30	2345	29°24.5'	115°19.0'	30	310°	4	partly cloudy	slight	15.68	33.53
113.32 ⁵ -H	30	2235	29°19.0'	115°29.5'	60	310°	4	partly cloudy	slight	15.88	33.43
113.37 ⁵ -H	30	1740	29°08.5'	115°51.5'	990	310°	4	cloudy	moderate	15.31	33.33
113.40-H	30	1620	29°04.0'	116°01.5'	990	310°	5	cloudy	moderate	15.41	33.21
113.42 ⁵ -H	30	1505	28°59.5'	116°11.0'	400	310°	5	cloudy	moderate	15.58	33.24
113.45-H	30	1400	28°56.5'	116°17.5'	750	310°	5	cloudy	moderate	15.69	33.26
113.47 ⁵ -H	30	1145	28°51.5'	116°27.0'	1800	300°	5	missing	moderate	15.73	33.27
113.55-H	30	0810	28°34.0'	116°56.5'	1900	310°	5	missing	moderate	16.70	33.39
113.60-H	30	0550	28°23.0'	117°17.0'	2015	310°	5	missing	moderate	16.87	33.40
117.26-C	16	1200	28°55.5'	114°42.0'	44	300°	3	missing	missing	14.30	33.39
117.28-C	16	1315	28°52.0'	114°48.5'	50	310°	4	fog	slight	14.30	33.51
117.32 ⁵ -C	16	1700	28°42.0'	115°05.0'	74	310°	3	fog	slight	14.92	33.46
117.35-C	16	1845	28°36.5'	115°15.0'	90	320°	3	fog	slight	14.90	33.44
117.37 ⁵ -C	16	2045	28°32.0'	115°25.5'	145	320°	4	fog	slight	14.29	33.31

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
117.42 ⁵ -C	IV-17	0115	28°24.0'	115°46.5'	1120	340°	3	partly cloudy	slight	15.52	33.32
117.45-C	17	0230	28°19.0'	115°56.0'	2000	340°	4	fog	moderate	15.88	33.36
117.47 ⁵ -C	17	0415	28°14.0'	116°06.0'	2450	330°	4	fog	moderate	15.88	33.37
117.50-C	17	0605	28°08.5'	116°15.5'	2150	340°	4	fog	moderate	15.90	33.42
117.55-C	17	0910	27°57.0'	116°35.0'	1900	330°	4	fog	moderate	15.92	33.28
117.70-C	17	1800	27°24.5'	117°32.0'	2100	320°	4	partly cloudy	moderate	17.08	33.85
120.27 ⁵ -C	16	0510	28°15.0'	114°24.0'	48	320°	4	clear	slight	15.28	33.49
120.30-C	16	0055	28°13.0'	114°34.0'	55	330°	4	clear	slight	14.14	33.53
120.32 ⁵ -C	15	0915	28°08.0'	114°44.5'	50	340°	2	clear	slight	15.27	33.47
120.37 ⁵ -C	15	2200	27°58.5'	115°03.5'	32	350°	1	partly cloudy	slight	14.76	33.49
120.40-C	15	2015	27°58.0'	115°16.5'	-	-	-	partly cloudy	slight	14.97	33.50
120.42 ⁵ -C	15	1830	27°47.0'	115°23.5'	1550	130°	1	sky obscured	smooth	14.42	33.56
120.45-C	15	1627	27°39.0'	115°30.0'	150	030°	2	sky obscured	smooth	14.03	33.46
120.47 ⁵ -C	15	1340	27°35.0'	115°40.0'	2000	360°	2	sky obscured	smooth	14.66	33.46
120.55-C	15	0805	27°22.0'	116°11.0'	2000	330°	1	cloudy	slight	15.66	33.31
120.60-C	15	0500	27°13.0'	116°32.0'	2000	340°	2	missing	slight	16.23	33.30
123.37-C	14	0120	27°24.0'	114°40.0'	39	310°	4	missing	slight	12.52	33.58
123.42 ⁵ -C	14	0530	27°13.0'	115°01.0'	1150	320°	3	missing	slight	15.06	33.53
123.45-C	14	0730	27°08.0'	115°10.5'	2200	320°	2	missing	smooth	14.68	33.46

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
123.47 ⁵ -C	IV-14	0935	27°03.5'	115°20.0'	2000	300°	2	missing	smooth	14.83	33.35
123.50-C	14	1110	26°58.0'	115°30.5'	2000	310°	2	sky obscured	smooth	14.88	33.28
123.55-C	14	1352	26°48.0'	115°46.0'	1950	320°	2	sky obscured	smooth	15.42	33.24
127.37-C	13	0325	26°49.5'	114°17.5'	1150	320°	6	cloudy	moderate	14.84	33.33
127.40-C	13	0135	26°44.5'	114°28.0'	1800	330°	5	overcast	moderate	15.12	33.48
127.42 ⁵ -C	12	2345	26°39.0'	114°39.5'	2000	330°	5	overcast	moderate	14.94	33.41
127.45-C	12	2210	26°34.0'	114°49.0'	1950	320°	5	cloudy	moderate	14.52	-
127.47 ⁵ -C	12	1925	26°23.0'	115°00.0'	2100	340°	5	cloudy	moderate	15.65	33.36
127.55-C	12	1400	26°13.5'	115°27.0'	2000	330°	5	overcast	very rough	15.82	33.22
127.60-C	12	1050	26°04.0'	115°46.0'	2000	350°	6	missing	very rough	15.54	33.38
130.35-C	11	1355	26°19.0'	113°48.5'	290	330°	4	cloudy	moderate	14.92	33.32
130.45-C	11	2030	25°54.5'	114°27.5'	2000	330°	4	cloudy	moderate	15.09	33.33
130.50-C	11	2315	25°48.5'	114°46.5'	1950	330°	4	partly cloudy	rough	15.36	33.33
130.55-C	12	0205	25°37.0'	115°08.0'	2050	340°	5	partly cloudy	rough	18.00	34.23
133.25-C	11	0540	26°06.0'	112°50.5'	46	300°	2	partly cloudy	smooth	14.48	33.43
133.35-C	10	2315	25°46.0'	113°27.5'	500	270°	2	partly cloudy	smooth	14.91	33.48
133.40-C	10	2015	25°35.5'	113°46.0'	2200	090°	2	sky obscured	slight	15.96	-
133.45-C	10	1735	25°25.0'	114°05.0'	1900	010°	3	sky obscured	slight	17.28	33.96
133.60-C	10	0915	24°54.0'	115°02.0'	2150	340°	4	overcast	slight	18.39	34.14

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters	T	S
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137.30-C	IV-9	1045	25°20.0'	112°45.5'	42	090°	2	clear	slight	16.33	33.93
137.35-C	9	1345	25°10.0'	113°04.5'	1788	300°	3	overcast	moderate	16.65	33.82
137.45-C	9	2045	24°48.0'	113°42.5'	1880	120°	2	sky obscured	moderate	17.54	34.04
137.50-C	10	0550	24°37.5'	114°02.0'	2150	040°	2	sky obscured	moderate	17.24	33.96

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